

Where Do I Get Porcupine Quills?

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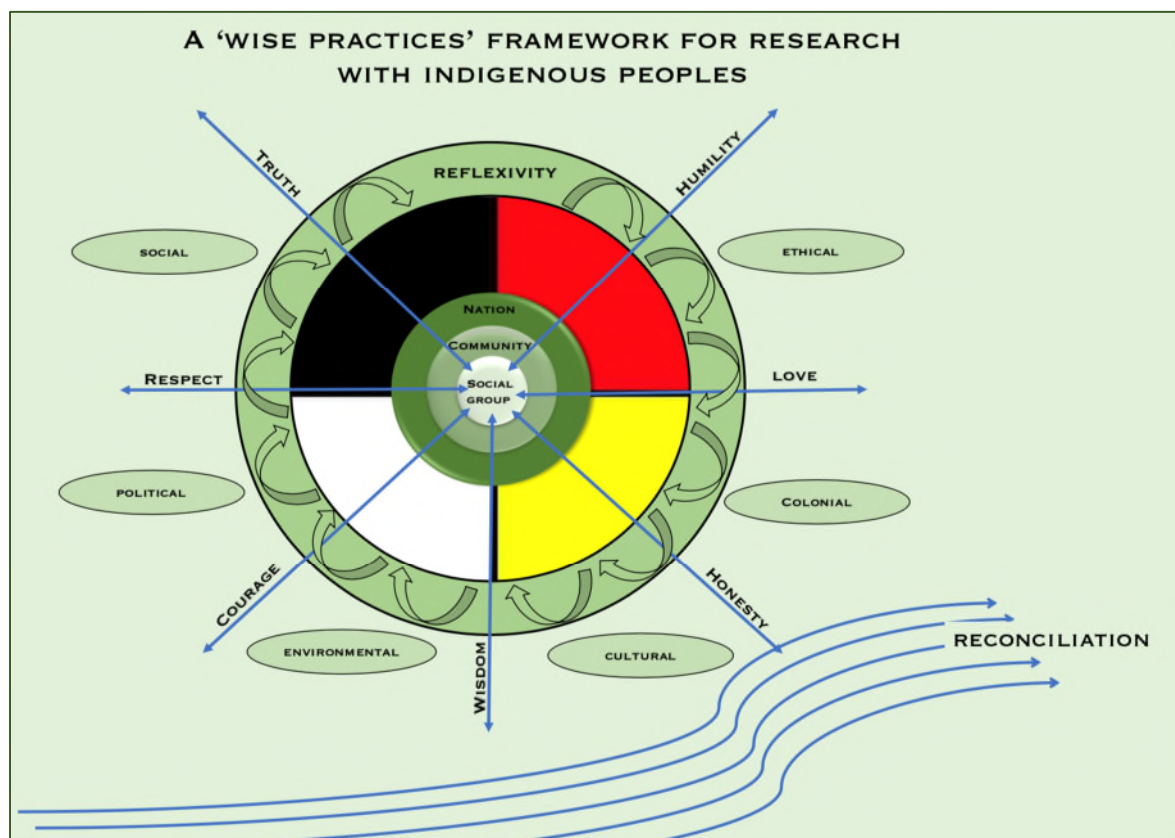
ABSTRACT

In Canada, and around the world, research ‘about’ or ‘on’ Indigenous peoples has traditionally been carried out at the expense of the peoples it was supposed to benefit. Many authors have proposed methods to increase the cultural appropriateness and respectfulness of the research. This research proposed using a traditional Dakota way of preserving and sharing knowledge (winter count) as a method that was culturally relevant and respected Indigenous ways of knowing to explore what First Nations youth believed contributed to their well-being. It incorporated aspects, principles, and concepts from Community based participatory research, Two-Eyed Seeing, postcolonial theory, and cultural safety.

The objectives for this research were a) to review and renew the winter count legacy in the community of Standing Buffalo Dakota First Nation through the youth, b) to build capacity within the participating youth to create and perpetuate winter counts that are tools for knowledge translation and transfer, c) to explore the utility, cultural appropriateness, and potential of winter counts as a visual research methodology, and d) to discover what these First Nation youth believe are important events in their lives that have contributed to their well-being and who they are today

Fifteen First Nations youth participated in learning about winter counts, creating an individual winter count, and sharing their winter counts with their peers, Elders, and teacher and in individual interviews. Several important lessons were learned. Lessons from the youth about well-being included the importance of contributions from physical activity, success, culture and spirituality, and relationships. Lessons about winter counts suggest that they are a way to build capacity about and understandings of traditional practices, a tool to prompt discussion, a tool for self-expression and creativity, a visual method, and culturally respectful research method. Most

importantly, the winter count is dynamic and pragmatic and its potential for knowledge sharing is limitless. Many additional lessons about the process of this research were learned. These lessons have been articulated through a wise practices framework, which includes values and considerations that are essential in research with Indigenous peoples. Wise practices in research are those that are adaptable, flexible, creative, reflexive, pragmatic, respectful, and culturally and locally relevant.



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Chapter One

Most Canadians enjoy one of the highest life expectancy rates in the world (Public Health Agency of Canada, 2011). Yet, certain Canadian sub-populations, which, due to a broad range of social, economic, personal, and environmental factors that go beyond any individual choices they make, experience health inequities. The First Nations¹ peoples of Canada are one of these groups. Nationally, they have higher infant mortality rates, higher rates of intentional injury (Sheppard et al., 2017), higher rates of respiratory, digestive, mental and behavioral, endocrine, genitourinary, musculoskeletal diseases, as well as other less favourable health outcomes (Guèvremont, Carrière, Bougie, & Kohen, 2017). Presently, the population of Indigenous (First Nations, Inuit, Métis) peoples in Canada is approximately 1.67 million people (Statistic Canada, 2017a). They represent approximately 4.9% of the Canadian population, a growth of 42.5% since 2006 (Statistics Canada, 2017a). The Indigenous population is young; nationally their average age is 32.1 years compared to 40.9 years for non-Aboriginal peoples (Statistics Canada, 2017a). The population Aboriginal population in Canada is also aging; the percentage of those over age 65 has grown from 4.8% in 2006 to 7.3% in 2016 (Statistics Canada, 2017a).

When one considers the health challenges faced by Indigenous peoples in the context of this population's growth and projected growth, the complexities and challenges seem insurmountable. One must question why these health inequities exist, what they will mean for the

¹ In Canada, the term Aboriginal is recognized to include First Nations, Inuit, and Métis peoples. The term Indigenous represents the original inhabitants of the land and will be used to refer to Indigenous peoples as a group. First Nations will be used when referring to the participants and partners in this research. Otherwise, terms will be used as intended by the original authors.

quality of life for Indigenous peoples, and what they will mean for the Canadian mainstream health care system. Further, one must ask if there is a role for nursing that can contribute to reversing or mitigating these health inequities. Falk-Raphael (2005) suggested that “research is needed that is inclusive of those who have been socially excluded because of race, gender, class, or other characteristics and can be instrumental in bringing their voices and experiences to the center of healthcare” (p. 222). I believe that we must begin by examining the ways which healthcare professionals engage in research with Indigenous peoples and how their voices and ways of knowing are captured and represented.

1.1 Statement of the Problem

How these voices and experiences are brought to light have historically focused on what is wrong with the peoples, how can it be fixed, and research has continued to colonize the peoples through Western research methodologies which showed no respect for First Nations ways of knowing or sharing their knowledge. To move forward, as researchers, we must recognize these ways of knowing and sharing; researchers should be engaging and exploring with First Nations people to understand, incorporate, and strengthen knowledge and capacities mutually within this emerging awareness. It is this recognition and respect of the First Nations paradigm which highlights the importance of community, traditional values, and spiritual practices, as well as emphasizing the significance of relationships that shape their identity, interdependence of human, natural, and spiritual worlds, and the continuum of past, present, and future (Barnhart, 2007). This research engaged First Nations youth in research utilizing a traditional method of translating knowledge, winter counts (winter count), to share their knowledge about health and explore this traditional method as a culturally respectful methodology (a culturally respectful system of rules, methods, and principles).

1.2 Purpose and Objectives

The purpose of this research was to explore the use of traditional winter counts as a First Nations way of knowing and knowledge translation for health with First Nations youth. The objectives for this research were a) to review and renew the winter count legacy in the community of Standing Buffalo Dakota First Nation through the youth, b) to build capacity within the participating youth to create and perpetuate winter counts as tools for knowledge translation and transfer, c) to explore the utility, cultural appropriateness, and potential of winter counts as a visual research methodology, and d) to discover what these First Nations youth believe are important events in their lives that have contributed to their well-being and who they are today.

1.3 Background

My involvement with the community of Standing Buffalo Dakota First Nation began in January 2005 as part of an undergraduate practicum. My involvement has included conducting a community assessment, working as a research assistant, conducting research as part of a Masters of Nursing degree, taking part in culture camps, assisting with Community Wellness days, speaking at youth nights, and often providing linkages or advice. I continue to have regular contact with many of those I have worked with over the last 12 years. Through these relationships I continue to learn about this community: the people, the culture, the strengths, the needs, and the hopes for the future.

1.4 Personal Reflexivity

Incorporated into the research process driven by Two-Eyed Seeing is positioning one's self. As part of reflexivity in my research I am writing this section to examine who I am, what I believe and how this may impact my research, my relationships, and my representation. For me,

this means recognizing that Western biomedical methods have not adequately addressed the disparities faced by First Nations youth in Canada. It also means that, as an outsider (non-Indigenous), I lack the ingrained cultural, social, environmental, and historical knowledge to maximize understandings of health in this context. This self-reflection was continuous throughout the research process. Even the title of this project reflects on how my position was influenced by my own ways of knowing and doing. While discussing the use of winter counts as a possible strategy in working with the youth to create their own winter counts, I had my pen and paper, eagerly making my list, making sure I was organized and getting all of the needed supplies. The Elder talked about how using porcupine quills to decorate the hides was traditional; then instead of focusing on listening and learning from him I focused on thinking about how I could procure porcupine quills. My question to him was “where do I get porcupine quills?” And he replied, “from a porcupine.” It was from that moment on I recognized I was trying to (with my Western academic goggles on) complicate and organize instead of listening and learning.

I am a mother, grandmother, wife, daughter, academic, nurse, researcher, and Caucasian Canadian and I am influenced by all these things. I believe in fairness, doing the right thing, and advocating for those whose voices have been silenced or reduced to a whisper. These values and roles influence my research and how I conduct myself within that research.

I have been involved in research with a First Nations community for the last 12 years. I am attending University pursuing a PhD in Nursing. I was born and raised in Moose Jaw, Saskatchewan in a middle-class family. I lived in a two-parent home with one brother and many temporary foster children. My father worked for the city police and my mother stayed home with us until I was about 12 years old and then she started her own business. I had close relationships with my maternal grandparents and loved spending every Friday night and sometimes more with

them. I believe now, looking back, how important that was in now understanding the roles of grandparents and the importance of intergenerational relationships in cultural continuity. Without the time I spent with them, there are many lessons that I would not have learned and many values that I would not have had instilled in me. My life was not always about family and middle-class life; I was a disobedient teen, a high school dropout, and a teenage mother. Beyond that I also earned a GED, got admitted to Practical Nursing, then Diploma Nursing, the Bachelor of Science in Nursing program, the Masters in Nursing program, and now a PhD in Nursing.

Through education, listening, learning, and maintaining an open mind I have been able to replace my beliefs about First Nations people from the ones that I grew up with. As a child I grew up in an era when it was acceptable to say derogatory things and reinforce stereotypes as being truthful for all people (I want to be clear here - I now believe there was never a time that this was appropriate or acceptable – it was always racism). As an adult I now have the honour of learning and developing new understandings and, more importantly, entrusted with educating others about these new understandings.

Why did I engage in this research? This is a complicated question and I can think of many reasons (in no particular order): I began looking at winter counts as part of a larger project and it made sense that I would continue this work; I wanted to know more; I wanted to help out with reintroducing this tradition to other youth and into the school setting; I loved working with the youth and the Elder and wanted to continue with this relationship; I want to be part of this research and highlighting the voices of the youth; I am concerned by the systemic barriers and challenges faced by Indigenous peoples and want to contribute to the literature on understandings of health and the ways we research together.

In exploring research and health, I am influenced by previous research. My experiences

have all involved community research and have used qualitative methodologies that have been mainly visual and oral methods. I have been mentored by Elders, community members, and committee members who are open and accepting to thinking outside the box (and even one who does not believe in boxes) and understanding of the opportunities and challenges when working with communities in research. I have experts to turn to and teachers for guidance. This has shaped me in so many ways. I believe in flexibility as opposed to rigidity, understandings and lessons as opposed to findings, and research with and for as opposed to research 'on'.

In the end, I want this research to answer questions, increase understandings, influence beliefs in a positive way, and also to inspire questions and a search for greater understandings. I want it to give voice to the youth who graciously let me share in their understandings of who they are and what they believe is valuable for research and wellness.

I value truth and that each person has their own way of communicating it. These 'ways' are influenced by individual worldviews, and the context, as well as our experiences in the world. I approached this research with a lens that encompassed beliefs from postcolonial theory, Two-Eyed Seeing, as well as cultural safety, and humility. During this immersive relationship, I have come to increasingly embrace cultural humility as a process of constant reflection on my personal biases, being respectful, and that I am a learner who has much to learn about others' experiences.

1.5 About the Community

Standing Buffalo Dakota First Nation's vision is "Standing Buffalo's pride in our Dakota culture will inspire us to become an engaged and united community, through support, empowerment and cooperation" (Standing Buffalo Dakota First Nation, 2010, p. 9). They were not signatories to a Treaty, but the people are included under the *Indian Act* (Standing Buffalo

Dakota First Nation). The population in 2016 was 569 living on reserve², with 220 aged 0 – 19, and the next largest group over 65 years (Statistics Canada, 2017b). The registered population was 1173 in 2013 (Government of Canada, 2013). They are governed by an elected Chief and six Councillors with elections held every four years.

In 2010, the community took part in a community planning process (Standing Buffalo Dakota First Nation, 2010), in order to identify their strengths, issues, and root causes. Strengths identified by the community included the land, the people, settlement, and economics. There is active farming, gardening, and ranching in the community, with preserving land and water a priority for Dakota people. According to the community plan, the location is beautiful, convenient, and a great resort area, replete with wildlife, plants, and medicines, plentiful hunting and fishing, and a sustainable large herd of buffalo. The people have a strong history of sporting and there are many opportunities for recreation. There is recognition for Elders, Dakota language is taught in the school, and cultural activities and spaces are plentiful. Another strength is the presence of many talented beaders, dancers, artists, drummers, singers, and tipi makers.

A growing infrastructure includes a health station, a personal care home, store, gas station, school, bingo hall, daycare, youth centre, and housing. Economically, they consider the community as stable and forward looking. Education is a priority and there are increasing number of graduates, First Nations teachers, and educational assistants, as well as employment

² In Canada, a reserve “is land held by the Crown “for the use and benefit of the respective bands for which they were set apart” under treaties or other agreements. Many First Nations (Indian Bands) include several separate portions of land as their reserve. Only those with Registered Indian status (i.e., Status Indians), may ‘own’ land on a reserve, though such ownership remains at the discretion of the ‘federal government’, and does not entail full legal possession” (The Canadian Encyclopedia, 2018, para. 3). This land is governed under the Indian Act.

opportunities at the local school, store, personal care home, and band office.

The community plan also identified some issues facing the community, such as pollution, diminished land base, loss of traditional knowledge, crime, health challenges, housing deterioration, water safety/security, limited transportation, and difficulty accessing employment and education. Community members identified some common root causes. These included “low self-esteem and hopelessness, lack of trust and respect, low employment levels, loss of language and culture, changes in the environment, cycles of abuse (physical, drugs and alcohol), lack of knowledge, understanding and skills, no sense of community, individualism, and legacy of residential school” (Standing Buffalo Dakota Nation, 2010, p. 105).

Chapter Two

Literature Review

2.1.³ Winter Counts

In 1877, Colonel Garrick Mallery presented his paper on a calendar of the Dakota Nation in the Bulletin of the United States Geological Survey. Mallery had come into possession of Lone Dog's winter count (Appendix A) in 1876 near Fort Peck, Montana Territory. He had this winter count copied, and, through interpreters, obtained information about the pictographs presented on the winter count. Mallery (1877) proposed "the symbolic record, being preserved and understood by many, could be used and referred to with sufficient ease and accuracy for ordinary purposes" (p. 6). Since this time, winter counts have been used by Indigenous peoples, academics, and researchers, as both a source of and a method for sharing knowledge.

2.1.1 what is a winter count?

Winter counts (waniyetu wówapi) are traditional pictographic calendars used to pass on history and other important community information (Smithsonian Institution, 2011). This is a Lakota term: waniyetu means winter or first snow to first snow, and wówapi means anything with two dimensional markings such as a book, flag, or letter (Burke, 2007a). For many tribes⁴, a year was defined as from the first snow of one fall to the first snow of the next fall (Cohen, 1942;

³ Section 2.1 has been published. Bickford, D. & Petrucka, P. (2016). Re-visioning the winter count. [Special Issue - Indigenous Knowledge as a Mode of Inquiry]. *International Review of Qualitative Research*, 9(4). The content of the article that is included in this dissertation was written in full by this author. The published article contains additional contributions written by both authors of the article.

⁴ It is recognized that tribe is a term used in the US, and band is the term used in Canada to mean a collective grouping of Indigenous peoples.

Howard, 1976). Although, there could be a variation “either way of one year from the Western (Gregorian) calendar date” (Howard, 1976, p. 2). Literally translated waniyetu wówapi means winters they draw (Thornton, 2002). Another Lakota term used to describe these calendars was hekta yawapi meaning count back (Risch, 2003).

Winter counts were kept by many plains tribes, such as the Blackfoot, Dakota⁵, Kiowa, Mandan, Ponca (Howard, 1960), Kiowa-Apache, North and South Piegan (Howard, 1976), and the Blood (Chamberlain, 1984). Collectively, these tribes have used winter counts to describe events that occurred in the modern states of Colorado, the Dakotas, Iowa, Western Minnesota, Montana, Nebraska, Oklahoma, Wyoming, and the southern regions of the Canadian plains provinces (Therrell & Trotter, 2011). Winter counts have also provided a lengthy history for these locations: winter counts in the possession of the Smithsonian and the National Anthropological Archives cover the years from 1700 to 1924 (Burke, 2007b).

2.1.2 purposes.

Winter counts had various purposes. They facilitated discussions of important or unusual events by the Elders or community members, were a method of preserving and passing on history, and were also used in determining one’s age (Burke, 2007a). For others, winter counts were created to provide a record of important events to instruct future generations, to keep track of the sequence of events, as a reference point for other events (Greene, 2005; Howard, 1976), and to assist ‘People’ in knowing and understanding their history (Scott, 2006). On occasion, the

⁵ According to Henning (1982), the Dakota, which means ‘alliance of friends’, were composed of seven bands: a) Mdewakanton, (b) Wahpekute, (c) Sisseton, (d) Wahpeton, (e) Yankton, and (f) Yanktonai. Although some of the literature on WCs uses the band name to identify the grouping that produced the WC, many authors use the term Dakota when referring to any of these seven bands. The term Sioux, meaning “He-is-a-snake” has also been used to describe the Dakota peoples (Laviolette, 1991).

keeper of the winter count would also display the winter count for the purpose of storytelling (Feraca, 1994). During these occasions of storytelling, the keepers may have also included other traditional, socially significant, or sacred stories (Risch, 2000).

According to Risch (2000), Lakota winter counts had two significant social functions: the first being a method of locating past events and the second to act as a “medium of moral and social instruction” (p. 25). In the modern context they are being used as a way to record family histories, community histories, births, and deaths (Burke, 2007a), or as a method of presenting a retrospective interpretation of a Nation’s history (Scott, 2006). It is important to note that, although events recorded on these winter counts represented a significant or unusual event, the winter counts may have been “of purely local interest” (Greene, 2005, p. 4), and some could have represented several groups (Chamberlain, 1984).

2.1.3 winter count keepers.

Each winter count had a keeper who was responsible for recording and remembering the events on the calendar, as well as an apprentice who was responsible for learning the stories and sometimes for making a copy of the original winter count (Burke, 2007a). The winter count keeper was responsible for ensuring the winter count was kept up (Cohen, 1942), for painting or drawing the pictographs (Greene, 2005; Howard, 1976), and for remembering the name of the years, as well as the details about the event that the pictograph represented (Greene, 2005). In many cases, the keeper would decide what pictograph would be used to represent that particular year as well as the name of the year (Chamberlain, 1984). This was particularly important because these pictographs were not self-evident but needed oral history to be passed along in order to understand the stories behind the pictures (Greene, 2005; Palmer, 2008). Other duties of the winter count keeper were to resolve disagreements about dates or the sequencing of events

(Greene, 2005). Some winter count keepers may have charged a fee for these types of services, or for services, such as assisting someone to find their year of birth or for dating certain events (Howard, 1976). The winter count keeper could be thought of as the tribal historian, and the editor or curator of the winter count (Chamberlain, 1984).

There were several ways in which the responsibility for keeping the winter count was passed on or handed over to another person. In some instances, when a winter count keeper became superannuated, an apprentice would take over and began memorizing the oral history utilizing the pictographs as mnemonic aids (Howard, 1976). This apprentice may, in some cases, have paid the winter count keeper to become his apprentice (Howard). In other instances, when the keeper passed away, the winter count may have been buried with them, passed to an apprentice, or sold to another tribe who then took on the responsibility for passing on the history and keeping the winter count (Burke, 2007a). The responsibility for keeping the winter count may have also been passed on from father to son (Risch, 2000).

It was common practice amongst the Sioux for more than one copy of a winter count to be in circulation; each maintained by its own keeper (Chamberlain, 1984). Each keeper had their own artistic style, which allowed for the identification of who drew the pictograph, whether or not the winter count was a copy, and when the winter count may have been taken over by another keeper (Howard, 1976). Winter counts were most often named after their last known keeper (Chamberlain, 1984).

2.1.4 symbol to script.

Each pictograph or symbol was a drawing of an important or unusual community event, such as a phenomenon, epidemic, or cultural event, or it may have represented a ritual, courtship practice, a dance, or a holiday celebration (Burke, 2003). Some examples of events which would

be included on a winter count are encounters with supernatural beings, intertribal relations, epidemics, floods, ceremony, astronomical phenomena, or military engagements (Howard, 1976; Risch, 2000; Smith, 1960).

Most winter counts included one pictograph for each year, except the Kiowa winter counts, which include two pictographs for each year, one for the winter and one for the summer (Greene, 2005). To differentiate between the winter and summer pictographs on the Kiowa winter counts, the winter events were drawn with a line connecting them to a black bar in the middle of the drawing (Appendix B), and the summer events were drawn with “an accompanying picture of the Medicine Lodge where summer ceremonies were held, or merely a picture of the forked center pole of the Lodge,” and, if no ceremony was held during that summer, a pictograph of a leafy tree was used (Greene, 2005, p. 3).

The placement and sequence of the pictographs differed from winter count to winter count (Appendix C). The pictographs that represented each year were arranged in several different patterns. Some were placed in a spiral that was read from the center outward or the edge inward, and some were linear from left to right and followed that same pattern for each line, or alternated with right to left in the next line (Greene, 2005; Risch, 2003). For some, “the most important factor was maintaining the sequence of the pictographs and thus, the chronology of events as they occurred” (Burke 2007a, p. 1). Although, according to Scott (2006), with Blackfoot winter counts, the chronological order is not as important as the story contained within the symbol, and that unlike the linear European method of recording history, Blackfoot “time was recorded in a circle” (p. 2).

Pictographs that represented a certain person were usually drawn by placing a representation of their name, such as a bird or animal drawn over a human head, or by drawing

the animal that represents one's name (Maclean, 1894). Some images were seen as having a form of spiritual power, in order to retain this power only those who had the right to do so could destroy, replace, or copy the winter counts (Risch, 2000). Most often, the pictographs on the winter counts represented events that were important to the individual keeping account, as well as those important to the nation (Cohen, 1942; Raczka, 1979). The decision of what went on the calendar was usually made by the keeper, along with a council of elder men from the community (Burke, 2007a). Community leaders or tribal historians would also select the events that were included on the winter counts (Greene, 2005; Howard, 1960a; Risch, 2000).

Many of the winter counts contain similar pictographs for the same year. One well-known example is the year 1833-1834, known as “the year the stars fell,” which is included on many winter counts (Cohen, 1942; Greene, 2005). This event, the Leonid meteor storm in November 1833, has been used to ‘date’ many of the winter counts and correlate them with the Western calendar system (Greene, 2005). Other examples of years when similar pictographs were drawn included the year 1825-1826, known as “the year of the great flood of the Missouri,” that is included on Big Missouri’s and Swift Bear’s winter counts (Cohen, 1942). There may be several explanations for these similarities: bands may have camped together, the event may have been of general interest to or witnessed several tribes, or the winter counts may have been reproductions (Cohen, 1942; Greene, 2005). Other explanations for these similarities include winter count keepers “living in close proximity and sharing or borrowing symbols; extraordinary occurrences such as meteor showers, which might have taken precedence for representation; and increasing murder and death rates of prominent individuals” (Risch, 2000, p. 27).

The winter counts and their keepers were not able to escape the influence of the arrival of the Europeans. Around 1853, a written Dakota language was developed by missionary Stephen

Riggs, which led many winter count keepers to abandon the pictographic type counts and use books or tablets to record written explanations (Howard, 1976). This represented a shift in the form and function of the winter counts. According to Risch (2003), this shift was related to the literacy of the winter count keepers and this was when:

the symbols of the document shifted from pictography to alphabetic writing, the documents themselves may have become somewhat alien to their producers. Now, instead of being produced exclusively by a traditional storyteller, winter counts were created by families or individuals of their own volition (p. 3).

These text versions of a winter count typically included nothing more than the name of the year (Risch, 2000). One example of this change from pictographs to text is the Major Bush winter count, (Appendix D) which used short written phrases to name the years and was written in an account book (Smithsonian, 2005).

2.1.5 paint on hide to ink on paper.

The arrival of the Europeans influenced not only the change from symbols to script on the winter counts, but also the material used to make the winter counts. Originally, the pictographs were usually painted on bison, antelope, or deer hide and then as other materials such as muslin or cloth became available they were used, and finally paper, such as ledger, journal, or account books, were used to record a non-pictographic form of the winter count (Grange, 1963; Greene, 2005; Risch, 2003), or even an army deserters' form (Chamberlain, 1984). This change in the material used to make the winter counts was also accompanied by a change in the medium used to draw the pictographs from paint or charcoal to ink or crayon (Finister, 1968; Thornton, 2002; Risch, 2003).

2.1.6 contemporary winter counts.

Two examples of winter counts have been crafted in recent history. The first example is a winter count by Her Many Horses. In 1999, Her Many Horses, a member of the Oglala Lakota

became the keeper of his tiośpaye's or extended families winter count (Her Many Horses, 2007). As the winter count keeper, he began contacting members of his family to consult them on what they felt should be included that year on the family winter count. This winter count is called Tasunka Ota Win Wanyetu Wówpí and is named after Many Horses Woman, his paternal great great grandmother. Although this is a contemporary winter count it utilized pictographs in the traditional sense, which were also accompanied by stories that enhanced the understanding of this winter count.

The second example of a contemporary winter count was by Scott (2006), a Blackfoot artist, who presented his winter count in order to “recount the oral history of the Blackfoot nation, ... [and] show the validity of our way of recording history through the use of a winter count” (p. 3). He explained that his winter count was both traditional and contemporary because he combined the written word with images to tell his story. It was also personal and tribal: personal because it was representative of his personal history and tribal because it represented the shared history of the Blackfoot Nation. Scott (2006) also stated that his winter count was underpinned by “Blackfoot spirituality, language, knowledge and the metaphysical relationship with the universe” (p. 3). Scott's winter count recorded what he deemed to be the most significant events that impacted the Blackfoot peoples since contact with Europeans, but rather than a single event for each year he separated history into several time periods and represented each period with one painting.

To represent the time period during which contact with Europeans began, along with the acculturation of and conversion to Christianity of the Blackfoot peoples, and the erosion of Blackfoot culture, Scott (2006) presented a painting titled Black Robes and Christianity (Appendix E). This winter count painting:

symbolizes a concept that did not exist in native spirituality prior contact: the devil. It was the time when belief in our Creator was undermined. It was the time when our legends were ridiculed in our spiritual societies were accused of consorting with demons. It was a time when Our Indian Creator was called the Father of Lies. Our faith in our Holy Bundles was eroded and their purity and sacredness were talks by Christian missionaries. Was a time when our sacred bundles were desecrated and destroyed (p. 63)

Another example from Scott's contemporary winter count is a painting titled Residential Schools, Drunks, and Jails (Appendix F) which symbolizes a time that:

was devastating for the children, the ontological attack on the Blackfoot culture and religion was aimed and implemented directly at them. Assimilation attempts and a conversion to Christianity made up for a very bleak period in the mindset of the Blackfoot. The institutionalized upbringing prepared many for the correctional facilities that exist in greater society (p. 109)

Greene (2005) stated “history is written by the victor - meaning that the voices of the defeated are often muted in the historical record, overwritten by the perspectives of the more powerful” (p. 1). Through the use of this contemporary winter count, Scott was able to create and present his own personal account of history to overwrite what he saw as a history written by others.

2.1.7 winter counts for sharing knowledge.

Indigenous peoples, academics, and researchers have used winter counts as an instrument for sharing knowledge, as well as a source of knowledge. According to Chamberlain (1984), winter counts contained information regarding:

religion, politics, social activities, hunting and other forms of subsistence, suicides and homicides, warfare and other cultural contact, disease, inter-tribal relations, quality of life, hard and good times, technological change, cultural change, folklore, material culture, climactic conditions, and response to natural phenomenon....[they also] include depictions of: humans, ways in which people were killed, scalps, articles of clothing, ceremonial instruments, flags, weapons, glyphic names of persons, animals, plants, tipis and other types of living quarters, and geological, meteorological and astronomical phenomena (p. S12)

Greene (2005) proposed that winter count keepers possessed deep knowledge of events but were not the sole keepers of the knowledge. She states knowledge “was dispersed throughout the community, with various individuals carrying knowledge of importance to them. The

maintenance of the winter counts as a central reference tool, however, provided a mechanism for this dispersed but overlapping knowledge base to be fitted together if one wanted” (Greene, 2005, p. 5). Winter counts represented knowledge that was seen as public knowledge; a framework or a common reference that could be used to construct or orally reproduce shared history (Greene, 2005).

Risch (2000) analyzed five Teton winter counts using case-role analysis and found that there were “four structurally distinct kinds of narrative events” (p. 32). These narrative event categories included ‘contest’, which encompassed events such as battles, horse captures, hunts, and deaths that occurred during battle; ‘used-up’; the second category, referred to events where death was a result of physical agent such as smallpox or whooping cough, as well as events such as cold weather that led to suffering or death, or catastrophic events such as fires and floods (Risch, 2000). The third narrative event category, ‘ceremonial exchange’, included events such as ceremonies or rituals, ceremonial exchanges, negotiations of peace, and conditions of plenty, such as having many blankets or an abundance of food (Risch, 2000). The final category was ‘celestial events’ and included an event in 1833–1834, which is included on most winter counts, as well as an event represented by falling stars in the year 1821–1822 (Risch, 2000).

Academics and researchers have used winter count for many purposes including as sources of knowledge for historical, ethnohistorical, epidemiological, sociopolitical, archaeo-astronomical, and ecological research. Galler (2008) analyzed winter counts as a way to explore the significance of the Yanktonai and their roles in strengthening relationships and kinship ties, initiating peaceful negotiations, and leading diplomatic teams between all of the Dakota peoples, and with the American military between 1680 and 1880. According to Howard (1955), winter counts represent one of the best sources of Dakota history, and are considered valuable for

observing changes in the Dakota language. He stated this was, “because each one was generated by the culture which records” (Howard, 1976, p. 15). According to Feraca (1994), winter counts “present to us a more human, realistic and credible portrayal” and are source of ethnohistorical and sociopolitical knowledge (p. 26).

Winter counts provided information about where certain bands were, who they were allied with, and who their enemies were (Greene, 2005). Henning (1982) analyzed 15 Dakota winter counts, from between 1790 and 1850, as sources of ethnohistorical information about cultural and societal changes that occurred during this time of primary migration and early contact and found that winter counts were accurate and corroborative sources of information. Other findings suggested that there were changes in the types of events included on the winter counts between 1790 and 1820 (Henning, 1982). Events depicted from prior to 1820 included those such as horse captures, warfare, and non-Lakota contacts. After 1820, the pictographs focused on food supply, group relations, as well as religious and supernatural phenomena.

Howard (1951) also used winter counts as a source of ethnohistorical knowledge to date the time of the adoption of the grass dance by the Dakotas as 1860. Winter counts also represent sources of knowledge about intertribal discourse, tribal locations, and other important elements of the Dakota culture (Howard, 1960b).

Risch (2003) used winter counts to examine how Lakota women were portrayed in the historical records. She found that women were represented in several different roles, such as that of makers, keepers, wives, mothers, and defenders of the home. They were also seen as important to the economic well-being of the tribes as preparers and handcrafters of goods for personal use and for sale. Risch (2003) also noted two women, God Woman and White Woman, who distinguished themselves as being capable of extraordinary feats, extraordinary enough that

they were included on winter counts.

Sundstrom (1997) used winter counts to study epidemic disease in the northern plains between the years 1682 to 1920. Most northern plains winter counts contained at least one pictographic reference of epidemic disease (Sundstrom). Contained within these references to epidemic disease was first-hand information about the relative morbidity and mortality of the epidemics as well as information about their impacts. For example, through analysis of 53 northern plains winter counts Sundstrom was able to observe that there were 36 major epidemics between 1714 and 1919 that epidemics occurred approximately every 5.7 years, there were correlations between poor nutrition and other stressors with epidemics and in some cases, there were also correlations with the severity of the epidemic. Hackett (1991) also used winter counts as a source of historical information on the extent of the measles epidemic of 1818-19 amongst the Dakota Sioux.

Sundstrom (1997) noted several challenges need to be considered when utilizing winter counts for epidemiologic study: there may be a variation of one year either way because of the Indigenous method of recording; the older the winter count the greater the chance that memories have faded because the reliance on oral history and the passing of oral history from one keeper to the next explanations for the pictographs may change over time (Sundstrom). One limitation noted in Sundstrom's study was that they were not always able to determine which disease was referred to in the winter counts. For example, diseases, such as smallpox, measles, and chickenpox, might have all been represented with similar pictographs.

Therrell and Trotter (2011) used winter counts to study extreme weather or climate events. They found that, although the winter counts may not "provide a useful quantitative record of climate, ... they do offer substantiation and insight into the impacts of the events recorded in

adjacent regions and may, in some cases, provide unique information about the spatial variability of climatic events” (p. 590).

Chamberlain (1984) used winter counts as a source for historical occurrences of celestial phenomenon. He analyzed 71 Plains winter counts and found five types of celestial events: (a) solar eclipses, (b) lunar eclipses, (c) fireballs, (d) comets, and (e) meteor showers. He also found that some events, like lunar eclipses or fireballs, were not always recorded on the calendars and speculated that it was because of the frequency in which they occurred. Chamberlain found that the 1833 meteor shower was included on all of the calendars, and other events, such as Halley’s Comet or solar eclipses, were frequently recorded on the winter counts. Perhaps this was because these types of events occurred less frequently or because the sun events were more culturally significant. According to Chamberlain (1984), with knowledge obtained from these calendars, one can complement knowledge obtained from other sources to learn about cultural astronomical knowledge and the importance of celestial events to the culture of the Indigenous peoples.

2.2 Indigenous Research and Indigenous Methodologies Defined

Windchief, Polacek, Munson, Ulrich, and Cummins (2017) defined Indigenous methodologies as “the unique ways researchers use Indigenous positionality and perspective to perform research with and within Indigenous communities. Indigenous methodologies center and privilege the Indigenous community’s voice(s) in an effort to contribute to the community” (p. 2). This is in contrast to Indigenous research, which they defined as “encompassing all research studying Indigenous communities, to include the plethora of qualitative, quantitative, and mixed methods that is done on or to Indigenous peoples, which often excludes Indigenous perspectives” (Windchief et al., 2017, p. 2). They note that this was not always the situation as it may include “research that is done with and for Indigenous communities in a culturally responsive and

community-centered manner” (Windchief et al., 2017, p. 2).

Kovach (2018) stated that

Indigenous research concerns itself with Indigenous matters, although it may or may not involve itself with Indigenous peoples. Indigenous research is interdisciplinary and includes methodologically diverse possibilities. Indigenous research can but doesn’t always mean Indigenous methodologies as identified by Indigenous researchers. Indigenous research can be viewed as an umbrella term that includes the myriad of research possibilities (para. 6).

Indigenous research is an umbrella term, which includes interdisciplinary as well as transdisciplinary teams, and uses both qualitative and quantitative methods. This also includes research that uses Indigenous methodologies. These are methodologies that are “founded upon Indigenous knowledge systems” and include four distinct aspects (Kovach, 2018, para. 8). These aspects are 1) Indigenous epistemology, 2) Indigenous theory-principles, 3) relational actions, and 4) re-storying (Kovach, 2018).

According to the Canadian Institute of Health Research (2017), Indigenous Health Research (IHR)

can be defined by any field or discipline related to health and/or wellness that is conducted by, grounded in, or engaged with, First Nations, Inuit or Métis communities, societies or individuals and their wisdom, cultures, experiences or knowledge systems, as expressed in their dynamic forms, past and present. Indigenous health and wellness research embraces the intellectual, physical, emotional and/or spiritual dimensions of knowledge in creative and interconnected relationships with people, places and the natural environment. Such research is based on the right to respectful engagement and equitable opportunities; it honours culture, language, history, and traditions. Indigenous health and wellness research, thus defined, may be implemented and adapted in research involving Indigenous peoples around the world. Whatever the methodologies or perspectives that apply in a given context, researchers who conduct Indigenous research, whether they are Indigenous or non-Indigenous themselves, commit to respectful relationships with Indigenous peoples and communities (para.1, 2, 3)

Indigenous methodologies do not take a Western method and adapt it for use with Indigenous peoples (Hinch-Bourns, 2013). Although there is no one method or prescribed process, there are some commonalities in Indigenous methodologies, such as the development and maintenance of

relationships and accountability to those relationships, as well as respect, reciprocity, responsibility, flexibility, reflexivity, and discovery (Hinch-Bourns). Along with these commonalities, Hinch-Bourns notes that the researcher must remember that the research must be ‘for’ the people who one is working with, it must include participants as co-researchers, and these methods must become part of the researcher’s life.

2.3 Working with Indigenous Peoples and Communities in Research

In Canada, and around the world, research ‘about’ or ‘on’ Indigenous peoples has traditionally been carried out at the expense of the peoples it was supposed to benefit. Many authors have proposed methods to increase the cultural appropriateness and respectfulness of the research. They have suggested that research with Indigenous peoples or communities include elements, such as Indigenous research methodology, cultural safety, decolonizing methodology, Two-Eyed Seeing, or reconciliation, through research as a way to incorporate the most appropriate knowledge. In Canada, research with Indigenous peoples also requires additional ethical considerations. According to Ten Fingers (2005),

whether researchers choose to utilize indigenous methodologies and upcoming research projects will soon become less and less of a choice, as First Nations increasingly develop our own research ethics and protocols that will apply to all research conducted in our territories and with her people upon our cultures and policy development, so to, will its direction change. The rate at which this will happen will be determined by the next research project that is undertaken with our people and in our territories. It will be apparent in the next policy.... working to change the direction of research and policy development, and it entails rejecting colonialism, reclaiming who we are, and revitalizing our cultures (p. S62).

Other considerations in research with Indigenous peoples or communities are the incorporation of an Indigenous paradigm or worldview. Inclusion of these views are important to increasing one’s understandings; the worldview will provide information about “the ways in which diverse groups of people create knowledge about the world around them and principles for engaging

with it” (Martin, 2012, p. 23).

Cochran et al. (2008) stated “the way researchers acquire knowledge in indigenous communities may be as critical for eliminating health disparities as the actual knowledge that is gained about a particular health problem” (p. 22). Maar et al. (2011) sought to find perceptions of what culturally appropriate methodologies were. Findings showed that when working with Aboriginal communities the researcher must take the time to establish trusting relationships, collaborate in all stages of the research, find agreement on the purpose of the research as well as the importance and timing of sharing the results, embrace methodological pluralism and flexibility, and engage in capacity building through research training and practice.

2.3.1. ethics.

In 1998, the National Steering Committee developed a set of principles for the First Nations and Inuit Regional Longitudinal Health Survey (First Nations Centre, 2007), known as OCAPTM principles, which stands for ownership, control, access, and possession (The First Nations Information Governance Centre [TFNIGC], 2014). These principles were positioned as a way to enable self-determination in research. According to the TFNIGC, Ownership refers to the collective relationship that a First Nations community has with its cultural knowledge, data, and information. Control refers to control over the research processes and how information is managed (TFNIGC). Ideally, this control will begin with the conception of the research, carry on through completion, and beyond to govern data management and use. Access refers to the rights of First Nations peoples to have access to all information or data about themselves or their community (TFNIGC). Possession refers to the process whereby ownership can be asserted and protected, and guard against breaches or misuse of their information and data (TFNIGC).

The Tri Council Policy Statement 2 is based on the core principles of Respect for

Persons, Concern for Welfare, and Justice, and covers all research funded by the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC). This document provides guidance for researchers working with First Nations, Inuit, and Métis peoples of Canada, but is not meant to replace guidance offered by the community or group members.

Respect for Persons includes consent that is free, informed, and ongoing, and in research with First Nations, Inuit, and Métis peoples was expanded to incorporate practices that reflect the worldviews of the people involved in the research. These practices must respect “extend to the interconnection between humans and the natural world, and include obligations to maintain, and pass on to future generations, knowledge received from ancestors as well as innovations devised in the present generation.” (CIHR, NSERC, & SSHRC, 2014, p. 113). Concern for Welfare is about protecting participants and/or their communities from harm (CIHR, NSERC, & SSHRC). It encompasses considerations for the physical, social, economic, and cultural environments. This principle also acknowledges the importance of the community in promoting a collective welfare. Justice, as a core ethical principle, refers to the duty to treat people fairly and equitably (CIHR, NSERC, & SSHRC). In research with Aboriginal peoples the ethical principles require the researcher to consider the power imbalances that are often inherent in the researcher/participant relationship. This imbalance may result in harm, such as misappropriations of sacred items, devaluations of traditional knowledge, violations of community norms, misrepresentations through dissemination, and failure to conduct mutually beneficial research (CIHR, NSERC, & SSHRC).

The TCPS2 is not without criticism. The TFNIGC (2014) stated the

TCPS does not reflect the specific priorities and values of First Nations as a distinct ethnic and political group, with established governance structures and processes for community engagement. Rather than acknowledging OCAPTM as reflecting universal First Nation values, it places OCAPTM as just one consideration for some First Nations, which may conflict with their own institutional policies (p. 10).

2.3.2 indigenous research paradigm.

According to Wilson (2008), the use of a dominant/Western research paradigm with attempts to incorporate culture or traditional protocols and practices as research tools “will always face problems in trying to adapt dominant system tools” for use in Indigenous research (p. 13). Instead, he suggests the use of an Indigenous research paradigm that includes Indigenous ontology, epistemology, axiology, and methodology. Beliefs and assumptions of this paradigm include: knowledge is relational, knowledge is shared and based on the relationships between things; relational accountability, which is about being accountable to the research and the participants, and being respectful. Indigenous methodologies also incorporate these beliefs and assumptions into process that includes reflexivity and reciprocity.

“Broadly, Aboriginal worldviews are characterized by their relational, communalistic, eco-centric and cosmo-centric focus. The emphasis on community over the individual, and on the interconnectedness of humans with the natural and spiritual worlds” (Roy, 2014, p. 118). Aboriginal worldviews, although diverse, share several common characteristics. These characteristics are:

(1) holistic and cyclical - everything is related; there are patterns that emphasize process rather than product; (2) in motion and change - they are in a constant state of flux and change; one must look at the whole to see patterns rather than only parts; (3) formed through language – which embodies the way a society thinks; most are verb rich, process-or-action-oriented; allows for the transcendence of boundaries, in other words, communication with the spiritual world or animal world; (4) land-based, whereby the earth is our mother is not viewed as a metaphor, rather it cannot be separated from Indigenous people; our relationship to Mother Earth is honored and renewed through seasonal ceremonies (Hinch-Bourns, 2013, p.22).

According to Chilisa (2012), in an Indigenous research paradigm, the purpose of research is “to challenge deficit thinking and pathological descriptions of the formerly colonized and reconstruct a body of knowledge that carries hope and promotes transformation and social change among the historically oppressed” (p. 41). This paradigm is underpinned by Indigenous knowledge, critical theories, and Neo-Marxist theories and assumes that there are multiple, socially constructed realities (Chilisa). Knowledge in this paradigm is relational and “is informed by the set of multiple relations that one has with universe” (Chilisa, p. 4).

An Indigenous research paradigm places as much importance on how the data is collected as it does on the acquired knowledge (Flicker et al., 2015). Geia, Hayes, and Usher (2013) proposed yarning or Aboriginal storytelling as a complementary to a “two way research paradigm.” Yarning involves an informal/relaxed discussion, which builds relationships and understandings, privileges the voices of the participants, and results in a thick description of the topic of inquiry (Geia, Hayes, & Usher). Hinch-Bourns (2013) proposed that storytelling is a research method that “is harmonious with an Indigenous research paradigm, epistemology, ontology or worldview, axiology, and methodology” (p. 77). It honours relationships, traditional knowledge sharing, and “as a research method, storytelling allocates a sacred space in which storytellers use their own voices to share their own stories in their own time.” (Hinch-Bourns, p. 77).

Koski et al. (2017) utilized an Indigenous research paradigm, which honoured relational accountability and Indigenous worldviews, through the use of journey mapping as a method. Researchers in this participatory action research sought to learn about end of life care and created a palliative care pathway. They incorporated a Two-Eyed Seeing approach within this paradigm so that the strengths of both Indigenous and Western knowledges could be integrated into their

findings. Journey mapping is a process that assists in learning about the experiences of the participants' barriers to access, where improvements can be made, desired processes and strategies for improvement through creation of a visual of their journey with palliative care (Koski et al.).

Foundational to this method was that “journey mapping must be founded in the community’s vision for change” along with the two core ethical concepts of “building trusting relationships” and “honoring community control” (Koski et al., 2017, p. 10). Common themes that were identified about the process of journey mapping were that it requires community planning, requires a time commitment, led to increased communication and supports the partnership, and was a recommended method to create a pathway (Koski et al.). The overall message from this research is that journey mapping was beneficial to this First Nations community in developing a palliative care pathway.

According to Getty (2010), Indigenous worldviews are not static; they continually evolve based on a variety of environmental and educational factors. Included in the Indigenous worldview are the beliefs that all things are interrelated, the cosmos is “a oral, compassionate, knowledgeable entity that teaches people lessons,” and that all life is sacred (Getty, p. 9). Other foundations of this worldview include a responsibility to care for all living things, the importance of the collective good, the importance of kinship in caring for and teaching children about respect, and the importance of Elders as knowledge keepers. It also includes core values such as balance, consensus, harmony, reverence, responsibility, and reciprocity.

Indigenous knowledge is developed through a process of observation and interaction, as well as through “visions, stories, and spiritual insights” (Getty, 2010, p. 9). Holistic education involves four ways of knowing: interactions within the community, interactions within the

environment, interpretation of dreams, visions, or stories, customs, and one's "internal efforts to attain and maintain spiritual ecology or balance" (Getty, p. 9).

As an oral culture, Aboriginal knowledge is not written down, contained in textbooks, or stored on shelves for reference or posterity. All things are considered living and spiritual, related and interrelated, and critical to life and living (Cajete, 2000). Cultural experts, such as Elders, hold knowledge in the traditional stories, in the ceremonies, and in the practices; teaching is by mentoring and learning is by doing and application. The laboratory for Aboriginal peoples is the real and applied world. Learning is not a linear process but rather continuous with multiple opportunities to cycle around; with each cycle one learns more at a deeper level. Failure is not built into the paradigm but rather learning is a life-long and continual process (Cajete, 1999, 2000). It is the clash or juxtaposition in ways of knowing and coming to learn between Aboriginal and Western paradigms that I believe presents the key challenges for Aboriginal learners in the Western system (Hogue, 2016, p. 162).

A postcolonial Indigenous research paradigm prioritizes the needs of the Indigenous community, is culturally sensitive in all stages of the research, seeks outcomes guided by Indigenous people, and results in increased "Indigenous knowledge and intellectual property" (Godinho, Russell, & Singh, 2015, p. 133).

2.3.3 two-eyed seeing.

Two-Eyed Seeing is a guiding principle developed by Mi'kmaw Elders in Nova Scotia as part of an Integrative Science Program at Cape Breton University. Development of this principle stemmed from the beliefs that both Indigenous and Western ways of knowing are important. Using multiple perspectives allows one to "draw on what is useful and relevant to inform and build upon," acknowledging multiple epistemologies is an important part of reflexivity, and valuing difference and contradiction as opposed to the assimilation of different perspectives (Martin, 2012, p. 31). Two-Eyed Seeing involves:

learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together, for the benefit of all...[it] adamantly, respectfully, and passionately asks that we bring together our different ways of knowing to motivate people, Aboriginal and non-Aboriginal alike, To use all our understandings

so that we can leave the world a better place and not compromise the opportunities for our youth through our own inaction” (Bartlett, Marshall, Marshall, & Iwana, 2012 , p. 11).

This guiding principle acknowledges that one’s perspectives are constantly changing and responding to changes that are taking place around us in our physical, ecological, and social worlds. It also acknowledges that we are all related, that “no one perspective is ever completely whole,” that knowledge systems should complement instead of competing with each other, and that knowledge production should draw on knowledge that meets the needs of the community (Martin, 2012. p. 37). For nursing research, using this principle challenges one to find new ways of doing research; ways that embrace multiple perspectives and multiple forms of knowledge, ways that encompass reflexivity, and ways that will lead to better health outcomes for Seven Generations forward (Martin).

Hall et al. (2015) explored the impact of cultural interventions in addictions treatment in Canada. Guided by Two-Eyed Seeing, they used storytelling to collect data, included ceremony, Indigenous governance over the project, and utilized a culturally rooted analysis. The focus on Indigenous governance led to a “decolonizing project that prioritized Indigenous methodologies and ways of knowing and knowledge alongside Western science” (Hall et al., p. 9). They found the use of Two-Eyed Seeing contributed to decolonization in this research.

Also guided by Two-Eyed Seeing as a framework, Rand (2016) explored the stories of strength of Inuit women. This framework was “the bridge between the Inuit ways of knowing and the academic ways of knowing (postcolonial research theory), and it drew on the strengths of each” (para. 8). They used storytelling to gather data to improve sexual health programming.

Vukic, Gregory, Martin–Misener, and Etowa (2016) employed a Two-Eyed Seeing approach along with Ermine’s concept of ethical space (Ermine, 2007) to understand Mi’kmaw

youths' mental health. They differentiated between these concepts and stated:

Two-eyed seeing is learning to see with the strength of indigenous and western ways of knowing for the benefit of all, whereas ethical space is about creating space for dialogue and discussion between different worldviews. Ethical space requires a dialogue about intentions, values, and assumptions throughout the research process (p. 212).

The methods used in this study included storytelling, talking circles, participant observation, and a community forum. They noted that there were challenges reconciling the need for textualized accounts of the research and the need to respect the underpinnings of the research, but also found that they gained multidimensional understandings along with respect for Indigenous ways of knowing. For them, utilizing Two-Eyed Seeing and ethical space with Community Based Participatory Research (CBPR) meant that their approach was “localized and grounded in the specific meanings, traditions, customs, and community relations that operate in each indigenous setting” (Vukic et al., 2016, p. 225).

2.3.4 decolonizing methodologies.

According to Smith (2006), Indigenous peoples need to take back control of their destinies through reclaiming, reformulating, and reconstituting their cultures and languages. As part of this self-determination, she proposes a strategic research agenda that includes transformation, decolonization, healing, and mobilization through use of Indigenous methodologies. In the Maori context, Smith defines this as “research that is culturally safe which involves mentorship of Elders, which is culturally relevant and appropriate while satisfying the rigour of research, and which is undertaken by a Maori researcher, not a researcher who happens to be Maori” (p. 186). In addition, this research “is a local theoretical positioning which is the modality through which the emancipatory goal of critical theory... is practiced” (p. 186). Smith also stated

Research in itself is a powerful intervention... which has traditionally benefited the

researcher and the knowledge base of the dominant group in society. When undertaking research, either across cultures or within a minority culture, it is critical that researchers recognize the power dynamic which is embedded in the relationship with their subjects. Researchers are in receipt of privileged information...They have the potential to extend knowledge or to perpetuate ignorance (p. 176).

Goulet, Linds, Episkinew, and Schmidt (2011) used theatre as a research method to create decolonizing experiences for youth. Based on Boal's Theatre of the Oppressed, this research involved basic acting games, image making exercises, and scene improvisations to explore themselves. Researchers found that these methods engaged youth in physical activity and fun, and provided opportunities for self-expression, decision-making, and leadership. It also established a trusting and safe environment for taking risks, encouraged a sense of agency, encouraged youth to think for themselves, and created a space where the youth experienced the freedom to imagine and express themselves, which allowed them a place where they could become "actors in and on the world" (Goulet et al., p. 113).

Arts-based activities, as part of a decolonizing research process, have been used with First Nations youth as a way to create a safe and comfortable environment in which they could "explore, critique, and reimagine their histories, current realities, and futures" (Yeun, et al., 2013, p. 269). The youth participants were between the ages of 12 and 20 and came from Cree, Saulteaux, Dakota, Nakota, and Lakota communities. Yeun et al. found that the use of arts-based activities provided a space for these youths to identify and reflect on personal, peer, and community strengths. Youths were also able to imagine their ideal community, and practice creativity in a collaborative and cooperative environment, as well as to create solutions and reflect on opportunities for change. Creation of this space was important to the process of decolonization in this research, as it allowed for stories to be created, histories to be reimaged, and futures to be invented (Yeun et al.).

Digital story telling has also been proposed as a decolonizing methodology (Cunsolo Willox, Harper, Edge, My Word, & Rigolet Inuit Community Government, 2013). Cunsolo Willox et al. utilized digital storytelling as a data gathering strategy in a project exploring the linkages between climate change and holistic health. They found this method supported the Inuit community in taking control of the research, creating their own research platform, and using their own voices in sharing their lived experiences. The use of digital storytelling was respectful of the tradition of oral storytelling and created a venue whereby the community's stories and history can be preserved in a culturally relevant way. They stated that "storytelling is also a powerful and essential component of any Indigenous based research, and should be respected as a way of sharing lived experiences, exploring personal beliefs and values, and discovering place-based wisdom" (Cunsolo Willox et al., p. 133). It was the act of creating that was found to be decolonizing.

Saskamoose, Bellegarde, Sutherland, Pete, and McKay-McNabb (2017) developed the Indigenous Cultural Responsiveness Theory (ICRT), a decolonized pathway, as guide for research with Indigenous peoples. The aim of ICRT is to improve the health of First Nations peoples through reframing, renaming, reclaiming, and restoring Indigenous methodological approaches.

This theory is based on several concepts. The first concept is Ermine's (2007) ethical space, which asserts that there is an ethical space that is formed when two distinct worldviews engage. Within this sacred space it is imperative that we work towards improving well-being for Indigenous peoples and engage in reflexivity, acknowledging differences prior to entering (Saskamoose et al., 2017). The concept of Two-Eyed Seeing is also incorporated in the ICRT model as it honours the strengths of both Indigenous and Western ways of knowing.

Neurodecolonization, the third concept in ICRT, involves changing the neural pathways from a colonized, traumatized, oppressed brain to one that creates “positive, empowering thoughts” (Saskamoose et al., p. 9). At the heart of this concept by Yellowbird (2012) are traditional ceremonies and mindfulness that challenge “Eurocentrically created mindlessness” (Saskamoose et al., p. 9). This ethical space brings together Indigenous and non-Indigenous peoples with the purpose of contributing to a better future. The fourth concept includes several protective factors for cultural based healing. These factors are described by Saskamoose et al. (2017) as *maskihkiy* (Cree for medicine) and include “spiritually grounded [seeing]; community-based [teaching]; trauma-informed [storytelling]; and strengths-based nurturing [healing]” (p. 9).

Photovoice has also been proposed as a decolonizing research method. Shea, Poudrier, Thomas, Jeffery, and Kiskotagan (2013) found that the key to this approach as decolonizing research was relationship building, participant engagement, creativity, collaboration, flexibility, and co-creation of knowledge. Baillie, Johnson, Drane, LePage, Whitecrow, and Lévesque (2016) utilized photovoice and talking circles to explore the link between activity and environment from the perspective of First Nations youth. The research was guided by CBPR and incorporated Two-Eyed Seeing and a postcolonial lens as an approach to incorporating Indigenous knowledge.

Art voice was proposed as a decolonizing method in research examining the perceptions of participants who took part in a traditional medicine workshop (Barwin, Shawande, Crighton, Veronis, 2015). This method was informed by photovoice, art therapy literature, and arts-based research. The authors discussed this research as using ‘methods-in-place’; the idea that research methods and results are related to context and create locally, culturally relevant research methods that respect traditional Indigenous ways of expression through art (Barwin et al.).

2.3.5 cultural safety in research.

According to Wilson and Neville (2009), the group being researched is who determines whether or not the research is culturally safe. In nursing care, cultural safety has been defined as:

The effective nursing practice of a person or family from another culture, and determined by that person or family. Culture includes, but is not restricted to, age or generation; gender; sexual orientation; occupation and socioeconomic status; ethnic origin or migrant experience; religious or spiritual belief; and disability. The nurse delivering the nursing service will have undertaken a process of reflection on his or her own cultural identity and will recognize the impact that his or her personal culture has on his or her professional practice. Unsafe cultural practice comprises any action which diminishes, demeans or disempowers the cultural identity and well-being of an individual. (Nursing Council of New Zealand, 2005, p. 4)

Cultural safety in research includes the “principles of partnership, participation, protection and power” (Wilson & Neville, 2009, p. 72).

Partnership is about creating “a space where the building of meaningful and ongoing relationships with those being researched can be established and maintained throughout the research process” (Wilson & Neville, 2009, p. 73). Building this partnership requires a foundation that includes engaging of the informants, establishing the needs of the group, and recognizing shared and different ideas that coexist within the partnership. Participation “involves the meaningful inclusion of key members” of the group (Wilson & Neville, p. 74). Inclusion of key members begins in the planning phases of the research and includes participation in decisions, such as research methods, informant recruitment, as well as data collection and analysis. Participation also includes involving community members as researchers or research assistants, and contributes to building capacity within that group.

Protection is about safeguarding the informants from exploitation, reinforcement of negative stereotypes, or underrepresentation (Wilson & Neville, 2009). Actions for protection include “identifying key beliefs, traditions, and protocols that must be observed during the

research process,” as well as “recognizing and respecting knowledge and epistemologies” the group may have (Wilson & Neville, p. 75). Protection is also about ethics: research must do ‘the right thing, at the right time, in the right way,’ as determined by the community (Wilson & Neville, p. 75). When discussing culturally safe research, power is inherently about knowledge and discourse (Wilson & Neville). Western research has taken the view that knowledge not created with in the traditional Western empirical ways was not valid. Culturally safe research utilizes a power-sharing approach.

Yarning has been proposed as a culturally safe research method when the quality of the relationship between researchers and participants are prioritized (Goulding, Steels, McGarty, 2016). Yarning was also used by Walker, Fredericks, Mills, and Anderson (2014) as a culturally safe research methodology. Many Indigenous peoples in Australia define yarning “as a conversational process that involves the telling and sharing of stories and information. Yarning is culturally ascribed and cooperative; yarns follow language protocols and result in some acquisition of new meaning” (Walker et al., p. 1217). Yarning can take one of four forms, with prescribed guidelines: “social yarning, therapeutic yarning, research topic yarning, and collaborative yarning” (Walker et al., p. 1218). In their research, Walker et al. used all four types of yarning at different stages in the research and also acknowledged two additional types: family yarning and cross-cultural yarning. These authors proposed that yarning is also a decolonizing approach as it is positioned around Indigenous ways of knowing and doing, and focuses on collaboration, respect, prioritization of Indigenous values.

2.3.6 reconciliation in research.

According to Justice Murray Sinclair, “reconciliation is about forging and maintaining respectful relationships” (Truth and Reconciliation Commission of Canada, n.d.). There are

several recommendations about how research can contribute to reconciliation. According to McGregor (2017), research has an important role to play in reconciliation and can contribute through providing information about the importance of informing Canadians about reconciliation and how it can lead to “healing and transformative social change” (p. 13). It can also inform policymakers on strategies to decrease intercultural conflict, increase social capacity, and strengthen our abilities to achieve sustainable reconciliation (McGregor, 2017). Informing Canadians requires partnerships, collaborations, and contributions that involve universities and communities or organizations that can record and report to a broader audience (McGregor, 2017).

In addition to this potential contribution to reconciliation, research itself needs to be reconciling. ‘Reconciliation Research’ requires researchers to a) “recognize and reconceptualize the ‘Indian Problem’ as a Canadian Problem;” b) “critically assess the Existing Body of Knowledge;” c) “Enable Structural, Systemic and Institutional Change;” d) “Respectfully Engage with Indigenous Peoples;” e) “Provide for Cultural Safety;” and f) “Reconciliation in Post-Secondary Institutions: A Call to Action” (McGregor, 2017, p. 14 – 17). Reconceptualizing involves all Canadians taking responsibility to work towards reconciliation and a brighter future for all. Critically assessing what is known means that one must look at all aspects of the research, scrutinize the methods, examine who has power in research, and be aware of ethnocentric and racist paradigms. Change can be undertaken through challenging the dominant Western paradigm, engaging in decolonizing processes, acknowledging the past and place, and working towards inclusive, sustainable structures. Respectful engagement involves nurturing positive relationships and engaging in conversation on all levels within the universities and the surrounding territories. Cultural safety in reconciliation “includes making space for ceremonies,

traditions and other expressions of Indigenous worldview” (McGregor, p. 16). The final suggestion of McGregor, referred to as Reconciliation in Post-Secondary Institutions: A Call to Action, involves examining our educational institutions, reflecting on our policies and procedure as tools that continue to colonize, prioritize collaboration and partnerships in research, and adhere to ethical principles of OCAP™ as well as self-determination and sovereignty.

2.3.7 health and wellness.

According to Sasakamoose, Scerbe, Wenaus, and Scandrett (2016), for First Nations peoples' health and wellness generally incorporate "balance, harmony, holism, and spirituality" and do not focus on disease or illness (p. 638). This is consistent with findings from two previous research projects with the community of Standing Buffalo Dakota First Nation. Youth have shown great insight in what makes them well and what they require for health and wellness.

Previous research with youths in this community explored what they believed hindered or contributed to their health (Bickford, 2011). Youth described the importance of family (nuclear and extended) as providers of spiritual, emotional, and cultural guidance. They also learned about their roles within the family and larger community and the family provided a place to practice the roles. Culture was also identified as a contributor to health and included cultural activities such as "sweat, powwow dancing, hunting game, fishing with snares, beading, drumming, and singing" (p. 38). Cultural items such as drums, beaded items, and pipes were seen as contributors to health. Not just for the physical items but because of the connection to the person they received it from and how it "reminded them of their heritage, their ancestors, and their responsibilities to themselves, their family, and community" (p. 40). The third theme they identified was the importance of the environment as a contributor to health. This was identified as a where they "came from" and their "home", as well as a place for health activities.

The following model incorporated the elements that influence the health of on-reserve youth and is based on the findings from the above research. The tree was a representation of how the youth requires certain element that enable them to flourish.

Roots and earth represent the community. The roots are where water and minerals that support growth are taken in and transported to the rest of the tree. I believe this is true of

the role of the community, without the services and supports available in the community, the families and youth cannot flourish (Bickford, 2011, p. 43)

The trunk and the branches are the family and are the supporting structure and

[j]ust as the family does, the function of the outer bark of the tree is to protect the tree and is renewed from within; the inner bark is made of living cells and conducts water and nutrients throughout the tree. Ancestors are represented by the heartwood which is deep inside is the tree and is considered the central supporting pillar of the tree. It is a deceased

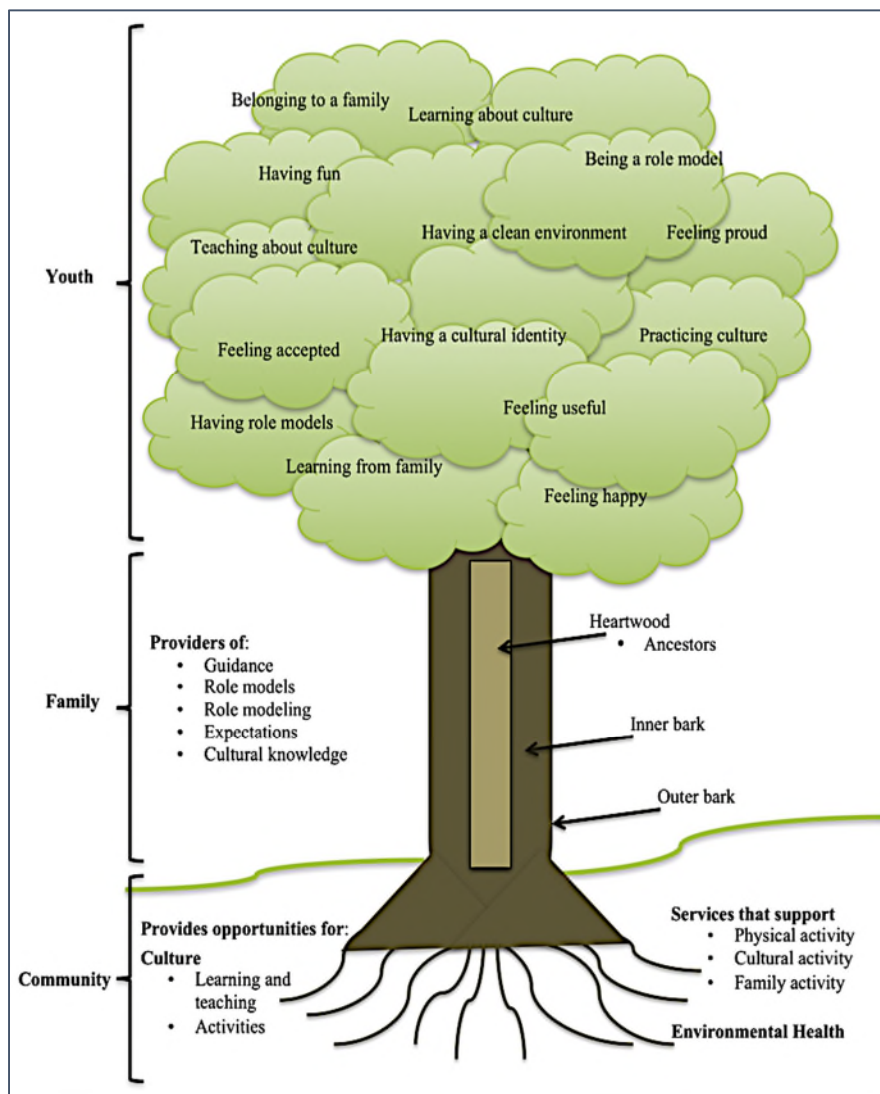


Figure 2.1. Elements that influence health for on-reserve Youth, Bickford, D. (2011). A secondary analysis: Paths to living well for on-reserve youth (Master's thesis) Retrieved from <https://harvest.usask.ca/handle/10388/ETD-2011-10-189>

layer, but does not decay or lose strength, just as the influence of the ancestors does not lose strength. The family is also the connection to the community both in a physical sense as well as in a cultural sense. In a cultural sense, if the family does not connect the youth with their culture they may not be able to have that part of their health provided for. Each branch grows in the direction where the elements for growth are provided. On the other hand, each branch is capable of changing its route. (Bickford, 2011, p. 44)

The youth are represented by the leaves, which show what they need to grow and flourish. As the leaves, they cannot grow and flourish without the solid foundation of the rest of the tree.

The Positive Leadership, Legacy, Lifestyles, Attitudes, and Activities for Aboriginal Youth project provided more insight into “living well” (Petrucka et al., 2016). During this CBPR, intergenerational teams (Elders and youth) co-created and co-delivered modules related to leadership, legacy, lifestyle, attitudes, and activities. This research was led by the intergenerational teams, with academics as observers and supporters (as needed). These modules were delivered as a Culture Camp for youth age 11 – 13 (78 participants in total) at Tatanka Najin school. During this camp the intergenerational teams included lessons about historical Dakota leadership and what it meant to be a leader from that perspective, the importance of language as an aspect of one’s identity, culture, and community, traditional cultural activities and beliefs, and how self-reflection is needed to be well. Participants were able to identify aspects of wellness that included the importance of language and history to their identity and the importance of values and participating in cultural in living healthy lives.

Chapter Three

Method

3.1. Design

This research incorporated aspects, principles, and concepts from CBPR, Two-Eyed Seeing, postcolonial theory, and cultural safety. The overall guiding principle was ‘tayan na écopi’ (a Dakota phrase that means to learn this well or to come together to share good things [B. Yuzicappi, personal communication, December 12, 2017; W. Goodwill, personal communication, 2011]). In this research, Two-Eyed Seeing influenced how knowledge was created, who contributed to the knowledge, how we contributed to the knowledge, what knowledge was of value, and how concepts were defined. Knowledge is learned, not earned. It is strengthened as it evolves from multiple perspectives, multiple sources, and through multiple methods. This project included several non-linear phases (visioning, learning, sharing, revisioning), which evolved and revolved around lessons and learning.

3.1.1 community based participatory research.

CBPR is an approach that stresses the importance of involving participants as active and equal throughout all phases of the research, with change or action as the anticipated end product (Holkup, Tripp-Reimer, Salons, & Weinert, 2004). It seeks collaboration between the community groups and researchers for the purpose of creating new knowledge or understanding about a practical community issue in order to bring about change (Stringer, 1999). Through this collaborative approach to investigation, I sought to engage ‘participants’ as equal and full partners in all phases of the research process – forming true partnerships through inclusiveness (Hudson & Taylor-Henley, 2001).

Partners included Elders, community researchers, educators and the youth. The Elders shared wisdom, guidance, and insights throughout all phases of the research. Without the Elders involved at all stages, there would be a significant challenge to the credibility and cultural dimensions of the research. The community researcher and educators brought knowledge and advice about the community; its people, and its cultural norms and protocols, and facilitated linkages with key community members. The youth participants learned, shared, and analyzed along with the research team. The youth also shared their stories and their voices to inform research and health planning.

CBPR includes a continuum of approaches focusing on power, knowledge, and action. These approaches build on the knowledge and strengths of the community, encouraging participation, and emphasizing co-learning, reciprocity, and joint decision-making power (Flicker, 2008; Hergenrather, Geishecker, McGuire-Kuletz, Gitlin, & Rhodes, 2010). CBPR represents a shift in thought, from the positivist and post positivist views of a single reality, seen objectively, and produced using scientific rigor, to a view that recognizes the value of community knowledge (Lincoln, Lynham, & Guba, 2011). Situated in the participatory paradigm, CBPR embraces multiple realities, co-created within a socially and historically constructed subjective and objective world (Lincoln et al.). CBPR is a qualitative methodology and, as such, is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self (Denzin & Lincoln, 2011, p. 3). This recognition of multiple realities and the value of community knowledge made CBPR a good fit for this research.

Blumenthal (2011) described two pillars on which CBPR rests. The first is an ethical response to historical exploitations of communities and the second is community empowerment. These two pillars can be related to the history and development of CBPR with roots in the Northern and Southern traditions, as well as Parsons' sociological theory (Wallerstein & Duran, 2008). This theory stressed equalizing power between researchers and participants, positing that self-reflection could bring about institutional change based on "new knowledge, education, and transformational leadership" without a political agenda (Wallerstein & Duran, p. 27).

3.1.1.1 benefits.

Although there are limitations in this methodology, it cannot be matched in its ability to empower communities, and gather pertinent, pragmatic knowledge, which leads to social action. Freire's (2009) philosophy influenced this tradition by changing the role of the community from one to be studied, to one that is participatory, and proposed that concrete reality cannot be the product of the subjectivity or objectivity alone (Wallerstein & Duran, 2008). Freire (2009) acknowledged the importance of having those who are oppressed critically evaluate their circumstances in order to liberate themselves from the oppression and "create a new situation, one which makes possible the pursuit of a fuller humanity" (p. 32).

Freire introduced two concepts: conscientization and praxis (Gaventa & Cornwall, 2004). Conscientization is the term for empowerment that Freire used to describe the movement from passive acceptance to active participation, through a process of action and reflection to construct their own knowledge (Gaventa & Cornwall). Praxis describes the action taken based on conscientization (Wallerstein & Duran, 2008). Freire believed the "purpose of education is human liberation, which means people are subjects of their own learning, not empty vessels filled by the knowledge of experts" (Wallerstein & Duran, 2008, p. 37). For utilization of this

methodology requires one to acknowledge there will be two equally valuable perspectives, the emic view of the community members and the etic view of the researcher, so collaboration is of the utmost importance (Streubert, 2011a). To this end, participants were engaged as co-researchers, co-creators, and co-constructors of knowledge.

The philosophical underpinnings of CBPR make this methodology the ideal choice for working with groups who have been marginalized or oppressed, such as Indigenous peoples, newcomers, institutionalized, and homeless peoples, as well as women or youth. Within CBPR, groups may realize voice and opportunity to examine an issue of importance, and consequently take action based on the findings. CBPR is seen as the most effective approach for culturally sensitive research (Bomar, 2010).

For nursing research, CBPR aligns with the ethical value of social justice, fundamental to the profession. It includes actions such as “recognizing and working to address organizational, social, economic and political factors that influence health and well-being,” recognizing “the significance of social determinants of health and advocating for policies and programs that address these determinants,” understanding that there are some groups who “are systemically disadvantaged, which leads to diminished health and well-being (Canadian Nurses Association, 2008, pp. 20 - 21. Nurses work to improve the quality of lives of all people, but, more specifically for those who are part of disadvantaged and/or vulnerable groups and communities, and they take action to overcome barriers to health care” (Canadian Nurses Association, pp. 20 - 21). Social justice also involves maintaining an “awareness of major health concerns such as poverty, inadequate shelter, food insecurity and violence. Nurses work individually and with others for social justice and to advocate for laws, policies and procedures designed to bring about equity” and working with “individuals, families, groups, populations and communities to expand

the range of health-care choices available, recognizing that some people have limited choices because of social, economic, geographic or other factors that lead to inequities” (Canadian Nurses Association, p. 20 - 21).

3.1.1.2 limitations.

There are several limitations to this methodology. When working with a community, there are some ethical considerations that the researchers need to be aware of. First is the possibility that “individuals from the marginalized group may become involved in the study without being aware of the potential tensions inherent in group process” (Streubert, 2011a, p. 317). They may not agree with the dominant members of the group or feel they cannot speak up or withdraw without causing further tension. It is important for the researcher to be aware of such situations and be prepared to adjust as needed. The second ethical dilemma to be aware of is “feelings of vulnerability felt by those who are invested in making a change” (Streubert, p. 317). These feelings may arise because of difficulties guaranteeing anonymity, confidentiality, or protection from harm, complexities of informed consents, or actions that may conflict with the organization in which community team members are employed (Streubert).

As part of the CBPR process, it is important to clarify roles and expectation at the outset, as well as to develop memorandums of understanding or partnership agreements that acknowledge power inequities as a technique to prevent confusion during the process (Flicker, 2008). Opportunities for reciprocal knowledge sharing should be incorporated within the research process to enhance the capacity of the research team for the proposed research and beyond (Streubert, 2011a).

Sampling in CBPR may also be a limitation and several considerations must be kept in mind when recruiting the sample, such as who is participating and who is not; are there voices

that are not being heard; and are the goals or knowledge needs the same for the whole research team or do individuals have different needs or goals? (Wallerstein & Duran, 2006). Discussion and negotiation of these considerations is best done at the beginning of the research process, although in CBPR the research process is never static and conditions may change over the course of the research (Wallerstein & Duran, 2006). In CBPR, the aim of sampling is to provide an understanding of a problem of local importance, so these decisions must reflect this.

3.1.2 two-eyed seeing.

Two-Eyed Seeing stresses a journey of co-learning. This journey includes reciprocity, respect, reflexivity, creativity, learning about commonalities and differences, while weaving back and forth between alternate worldviews (Bartlett, Marshall, & Marshall, 2012; Iwama, Marshall, Marshall, & Bartlett, 2009). Reciprocity must be built into all areas of the research and, as researchers, we must always be aware of how our privilege places us in a position of power, which inherently skews the benefits of research in our favor. Respect is about acknowledging and honouring different views, respecting each other in the research process, and including ethical considerations at the forefront of our research. According to the late Chief Charles Labrador of the Acadia First Nation, Nova Scotia, Two-Eyed Seeing is underpinned by the belief that “only when knowledge is conditioned by respect can it be truly shared” (quoted in Bartlett, Marshall, Marshall, and Iwama, 2012, p. 19).

Reflexivity is about making your actions, values, knowledges, and culture transparent, examining them and acknowledging how they affect your actions, values, and knowledges. It is through reflexivity that we learn about our commonalities and differences. Weaving back and forth is necessary for developing greater understandings yielding wider and deeper views. It also includes fine tuning your mind, looking at others’ perspectives, and other ways of doing things.

All the while acknowledging, the Indigenous worldview provides the sense of whole while the Western worldview provides a sense of the parts (Bartlett, Marshall, & Marshall, 2012).

To understand Two-Eyed Seeing it is important to understand what it is not. Two-Eyed Seeing does not merge or assimilate knowledges together or use bits and pieces of Indigenous knowledges and append them to Western knowledges and approaches. Most importantly, it does not include the domination of or supplanting one worldview over another. Percentages are not considered in this principle; it is not 50/50 or 60/40 but rather Two-Eyed Seeing is governed by what knowledge(s) make sense or what is necessary in a given circumstance.

Two-Eyed Seeing can be further understood by examining the visual presented in Figure 3.1. This visual representation of Two-Eyed Seeing represents two eyes positioned behind two connected pieces of a puzzle (Institute of Integrative Science, n.d.). The puzzle pieces remind us that with Indigenous knowledge, no one person possesses the whole of the puzzle, just one small piece; thus, recognizing that Indigenous knowledges are collective in nature. In Western knowledge, the same can be said for possessing one small piece of what is known.

Figure 3.1 Two-Eyed Seeing

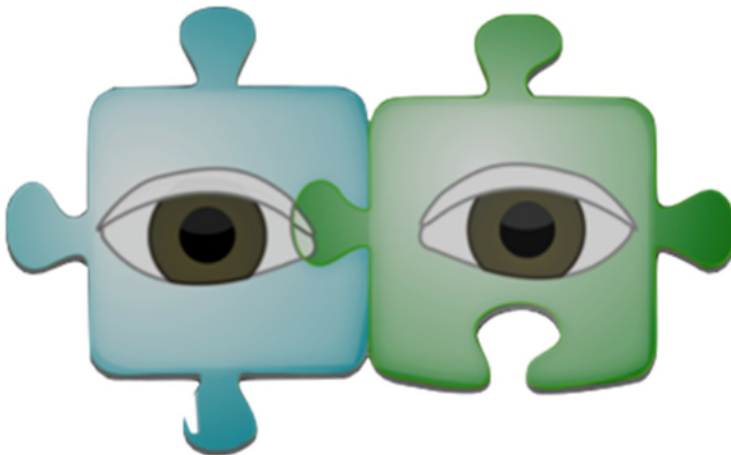


Figure 3.1 A visual representation of Two-Eyed Seeing. Institute for Integrative Science. (n.d.) Two-Eyed Seeing. Retrieved from <http://www.integrativescience.ca/Principles/TwoEyedSeeing/>

3.2 Setting

The setting for this research was the community of Standing Buffalo Dakota First Nation in the western Canadian province of Saskatchewan. This community is a rural reserve located eight kilometers from Fort Qu'Appelle, and approximately 71 kilometers from Regina, which is the nearest urban center. The school on reserve is named Tatanka Najin in honour of the hereditary Chief Standing Buffalo. It is a pre-kindergarten to Grade 9 School with approximately 120 students. The school follows the provincial curriculum augmented by integration of Dakota culture and language. Ms. Tawiyaka's grade 8/9 class were my partners in this research.

3.3 Process

I began by approaching Leanne Goodfeather (Councilor for education at the time) to discuss this research and gain permission to begin the process. She agreed that this research may proceed and had several requests: that I provide her with regular updates, that I work with Cheryl Tawiyaka as a community researcher, that I start recruitment with the Grade 9 class at Tatanka Najin School, and that the results be shared with the community at the end of the process. Cheryl Tawiyaka, the community researcher, was my primary contact for this research in the community. Along the way there were changes to the community researcher role and contacts. My primary contact was the youth coordinator at the health centre and the primary research partners became Ms. Inez Tawiyaka (Gr. 8/9 educator) and Ms. Beverly Yuzicappi (Elder and Dakota Language educator) at Tatanka Najin School.

Stringer and Genat (2004) discussed the process of action research as beginning with the Look – Think - Act research cycle. Look involves the researcher developing a preliminary understanding of “who is involved, what is happening, and how, where, and when events and activities occur” (p. 36). Think, involves the researcher reflecting on what they are seeing and

deepening their understanding of what was learned in Look, as well as the stakeholders group or groups (Stringer & Genat). Act is when next steps are planned and implemented. The cycle then repeats to evaluate these steps (Stringer & Genat).

The process for this research goes beyond the steps of the Look-Think-Act cycle, as this cycle does not encompass the relationships, lessons, co-creation, flexibility, and creativity that was embedded in our research. Each of the elements of our process will be described in the following discussion of our process.

Figure 3.2 Timeline

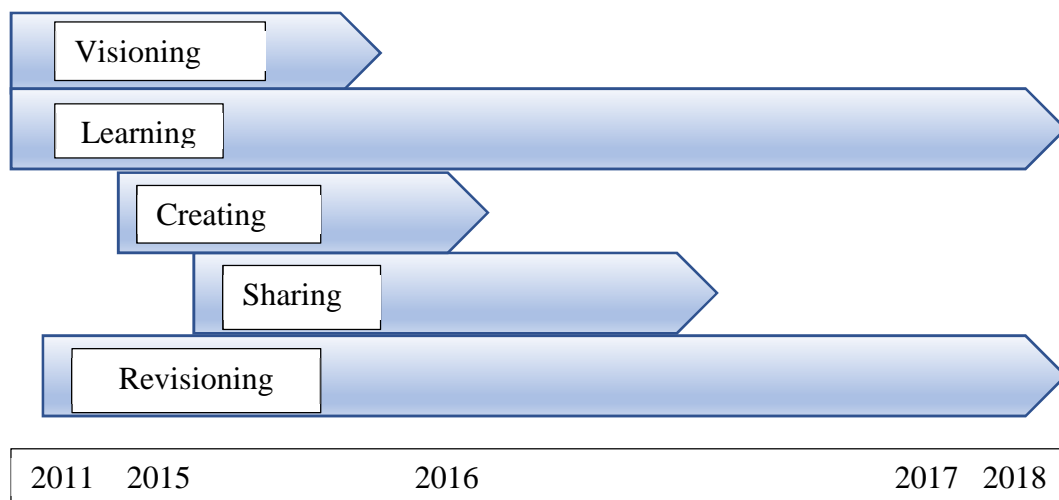


Figure 3.2 Timeline for Where do I get Porcupine Quills.

Descriptions of each phase to follow.

3.3.2 visioning.

Visioning began as part of a previous multi-year, multi-phase program of research that used photovoice and other art-based approaches to explore beliefs about health (Bickford, 2011; Petrucka, Bassendowski, Bickford, Goodfeather, 2012; Petrucka et al., 2016). In 2011, the research team learned about a tradition that was no longer practices in this community and Elder Wayne Goodwill had been discussing the creation of his own winter count and the possibility of creating them with the youth. This is when the visioning began. During this time, we (research

team – includes academics, Elders, community researchers, and youth participants) discussed the possibilities for the winter counts and learned more about this traditional method of preserving and sharing knowledge. Visioning was about learning from each other, sharing with each other, consulting each other, discussing possibilities, and planning our next steps.

3.3.2.1 recruitment.

Recruitment began in October 2015. All of the students in Ms. Tawiyaka's grade 8/9 class at Tatanka Najin School were invited to participate. At that time, there were 19 youth in the class. Recruitment included a presentation on winter counts, an explanation about the proposed research, and a question and answer session. This presentation took place during regular class time and included myself, the community researcher, the teacher, and an Elder. Following the presentation, I provided each of the youth with an information package that included a parent/Guardian letter, a participant consent form, and a confidentiality pledge (Appendix G). All sessions were held during class time and all students in the class created a winter count as part of their school work and were advised that participation in the research was optional.

3.3.2.2 participants.

In total, there were 19 youth in the Grade 8/9 class when I presented to the class and asked for their participation. Twelve youth (2 females and 10 males) were in Grade 9 and seven (3 females and 4 males) in Grade 8. All of the students in this class lived on the reserve and were between 13 and 15 years old at the time of recruitment. All of the students completed (15) or partially completed (4) a winter count, and of those completed 15 gave assent and participated in interviews. Only these 15 youth had their data included in the Lessons. Of the four that did not complete their winter count, one was offered an interview on their partially finished winter count and declined, two were not available for interviews (sick, away for sports), and one had moved.

	Total students in grade 8/9 class	Attended learning session and information about research	Created winter count	Participated in Individual Interview	Withdrew		
					Moved	Absent	Did not complete winter count/declined interview
Male participants	14	14	14	10	1	2	1
Female participants	5	5	5	5			
Total participants	19	19	19	15	1	2	1

Figure 3.3 Participants – who took part in each part of the process

There were five other individuals who collaborated with me in this research, who mentored and shared with me. Cheryl Tawiyaka was the community research than I began working with on this project. She assisted with recruiting, provided advice, and interviewed the Elders and partners. Mrs. Inez Tawiyaka played an integral part in this research. She supported the research by allowing me to be part of her classroom, partnered with me to teach the youth, advised me on protocols, shared stories with me, provided feedback on the winter count as a method, took part in data analysis, and we will work together to develop a teaching module on winter count.

Elder Wayne Goodwill has been involved since the inception of this research and was the one who taught me about the winter count, and advised on using the winter count as a research method. He was also interviewed about the winter count by the community researcher. Elder Beverly Yuzicappi has also been an integral partner in this research and has advised on drawings, history, and language, as well as providing feedback on the winter count and assisting with data analysis. She led the sharing circle and provided education on the medicine wheel when the youth were doing their data analysis. Elder Rosabell Goodwill was also involved for a short

period over the summer of 2015 and came to each of the meetings to oversee, advise, and talk to the youth about drawing pictographs. Her health was not well and she was not able to continue.

This research was envisioned as furthering the understanding of what wellness means to First Nations youth, exploring a traditional way of preserving and sharing knowledge, and reintroducing the winter count (it was previously introduced as a pilot project and winter camp in this community) as a way of preserving knowledge. The visioning process took place over several years, from talking with a community researcher during the previous project about reintroducing winter counts as a traditional way of creating and sharing knowledge, preserving history, and providing instruction on moral and social expectations. Two-Eyed Seeing was incorporated into visioning by focusing on a co-learning process, which built on an inclusive partnership, reciprocity, creativity, and storytelling.

Inclusive and authentic partnerships were a key component, especially, recognizing each other's strengths. The participants, Elders, educators and community researcher supported each other to enhance our strengths. The partnership continued to expand as others were brought in during the learning phase to strengthen the research. For example, a language teacher and Elder joined to support understandings in a cultural context as well as to learn more about sharing knowledge and preserving knowledge using a winter count.

Reciprocity is an important part of Two-Eyed Seeing as well as the OCAPTM principles. Common goals for the research included cultural renewal, which involved youth, educators, and community members learning about a tradition that had ceased some time ago. Elders also shared traditional knowledge about other aspects of Dakota life and culture, which contributed to cultural renewal. It was at the beginning of this research that an Elder (the late Ken Goodwill) stated that he was worried about the youth and wanted research to focus on keeping them well,

so we also focused on how to help the youth be well through understanding their strengths and, for others, understanding how to support the youth.

We also focused on learning together and learning from each other. The Elders directed the learning process. My role was to support, facilitate, and learn. If we examine the following visual (Figure 3.2) with two people, each with their own way of knowing and creating (Institute for Integrative Science & Health, n.d.) it helps one develop a better understanding of relationships from a Two-Eyed Seeing lens. It is about creating a place for open sharing, a place of trust where genuine sharing and learning can take place; one that invites trust and, in turn, leads to sharing and co-learning. This visual depicts a principle for research relationships, bringing together worldviews, which is a foundational aspect of Two-Eyed Seeing. This exchange involves suspending all judgements and opinions, listening to each other, and creating a place of trust.



Figure 3.4. Integrative Science Vision A visual representation of the exchange of stories as a relationship. Institute for Integrative Science & Health. (n.d.). Exchange of stories. Retrieved from www.integrativescience.ca/principles/exchangeofstories

The use of traditional methods of keeping and sharing knowledge required creativity. This is where First Nations ways of knowing took the lead. Winter counts, in a traditional sense, were used to facilitate discussions, as a method for preserving and passing on history, as a way to

assist people to know their history, and as a guide in moral instruction. The modern winter count has been used to record family history, community history, births, deaths, and other important events, as well as a retrospective interpretation of a nation's history. Storytelling is an interconnected form of sharing, recognized as a method of sharing cultural knowledge, teaching lessons, or reflecting on events. Stories include contextual knowledge and, in the case of the winter counts, the pictographs are not separated from their stories.

3.3.3 learning.

The learning phase was about honoring traditions and knowledge, sharing with each other, encouraging creativity, and building capacity around this tradition. For this phase of the research the Elders and I led a discussion and learning session that included information about the winter count (i.e. purposes, roles, transitions, creation of), examples of traditional and current winter counts (from literature and from a previous pilot project) and drawing lessons from Elder Wayne Goodwill. Although the youth created a winter count that represented who they are, it was important to discuss the cultural and historical significance, so they could incorporate that into their interpretations as they saw fit. Participants were asked to think about important events that have influenced their wellbeing. They were also encouraged to include their family and other significant persons in their lives in the discussion about what they might include as being important for a particular year of their lives. Ultimately, the decision about what to include on the winter account was theirs to make. They were asked to make notes regarding their decision on choice of a pictograph to represent each year so the notes could assist in our discussions about their winter count.

Education was incorporated as part of the research process as the tradition of winter counts was not well known within the community of Standing Buffalo Dakota First Nation. Very

few members of this community had heard about winter counts prior to their introduction as part of a culture camp for community youth. Part of the preparation for this research, in addition to learning from the Elders, has included obtaining literature about winter counts, visiting the Smithsonian to meet with experts in this tradition and view artifacts, arranging for an expert from the Smithsonian to present on winter counts at the community, and working with a group of youth leaders to disseminate the winter count legacy within the community.

As we embarked on learning it was important to reflect on what each person contributed. Incorporating the strengths of each person brought multiple realities, local knowledge that was land and ecologically based and integrated into each one's identity, subjective experiences, as well as relevant answers to our important questions. The inclusion of a male and female Elder, a community researcher, an educator, a group of youth, and myself was important in developing our understandings and being able to reflect on the process. I was advised by the community researcher that it was important to include both a male and female Elder because in the Dakota culture, there are distinct roles for each, as well as language differences between genders. When utilizing Two-Eyed Seeing as a guiding principle, ongoing reflection was important reflecting as we continued to evolve and learn.

Other important considerations during the learning phase were integrating ceremony and culture. Ceremony was integrated through prayer and sharing food, as well as gifts of tobacco or cloth. The use of the youth's spirit or Indian names was used to identify themselves on their winter counts. Elder Wayne Goodwill taught them how a pictograph representing their spirit name could be drawn. He explained that using their spirit name is important for connecting knowledge with the ancestors and integrating history into one's identity, as well as a source of pride. He said "be proud of your name. It's who you are." Not all of the youth knew their spirit

name and instead drew a pictograph to represent who they were. One participant in a previous learning event explained the significance of using his/her name “I use my Indian name so that the ancestors will know who I am.”

3.3.4 creating.

The creating phase was about implementing what we learned during the visioning and learning phases. During the creating phase, participants designed their own individual winter count based on what they believed were important events in their life. Prior to creating, I discussed the purpose of the research along with the meaning of consent and what it meant for this research. Instructions to participants at this time were that they create their individual winter count based on their vision of what represents who they are and what important events contributed to their well-being and who they are today. The youth were each provided with a hide, ink, beads, and time during class to complete their winter count.

Two-Eyed Seeing was incorporated through guidance from the Elders, stories, and self-expression. While sharing his own winter count, the Elder showed a pictograph of a girl and the river. He shared the story of his sister falling into the water and being saved. Although this was a story about an event that happened it also provided context. We learned about gender roles for youth: he was fishing, and his sister was getting water. We learned about responsibilities to your siblings and your family and also about what his father was doing when this event happened.

This phase presented an opportunity for storytelling and discussion between the youth and their immediate and extended families and significant others. The process of creating a winter count included some retrospection. Many of the youths had discussions with their family about the years when they were young, and from that discussion, decided what the most important event for that year was and how it should be represented on their winter count. This is very similar to the traditional processes, where a group, following reflection and discussion

decided the most important or unusual event of that year.

Self-expression was encouraged throughout the creation of the winter counts. Each participant was encouraged to make it as they saw fit. Traditionally, there were many ways to create them from the size of the pictographs, their positioning, and the materials used in their creation. Literature on arts-based research supports the use of similar visual methods with Aboriginal youth to empower, enhance, and create capacity, as well as a decolonizing method and an act of self-determination (Yeun et al., 2013).

3.3.5 sharing.

This phase involved a sharing circle, semi-structured interviews, and a classroom discussion and analysis session with the youths, teacher, and Elders. As a researcher one of the most important skills we can have is being able to listen. The sharing phase was about taking on the role of a listener and a learner. Sharing involved the youths as experts – sharing their stories and insights.

3.3.5.1 sharing circle.

Sharing circles, as pedagogical situations, reflect the work of Freire as places of sharing and learning (Hart, 2007; Kamberelis & Dimitriadis, 2011). Strengths of using a group context for data collection includes the ability to see reality as it is socially constructed, to witness group norms and dynamics, and collective thinking; it has the ability to raise the awareness of the participants, which is potentially empowering (Kamberelis & Dimitriadis, 2011). Hart (2007) also reflects that “sharing circles provide the context for the presentation of each participant’s thoughts and the development of a shared understanding” (p. 87). Limitations of focus groups include the possibility that some members of the focus group may not be comfortable to speak up and have their voices accounted for. This may be related to opinions or beliefs that conflict with

the group or not feeling they can speak up in a group situation.

One sharing circle was held prior to the individual interviews, which focused on the youths' experiences in creating a winter count. Elder Beverly Yuzicappi was involved and led the circle. This was a semi structured sharing circle; questions were used to guide the discussion and were followed by a time for open discussion. (Appendix G). Prior to beginning the sharing circle I reviewed the confidentiality pledge with the participants, informed them of the purpose of the sharing circle, and provided instructions based on the Elders' guidance. According to Murphy (2012), sharing circles provide opportunities for participants to learn, share, and create meanings in a safe, interconnected environment. We positioned ourselves in a circle so that everyone was able to see everyone else's eyes. The circle represents equality, unity, and the building of a community. Standards of presence have been developed providing some guidelines for conducting a sharing circle (Murphy). The guidelines we included were: taking responsibility for yourself, maintaining confidentiality, adopting a beginner's mind, maintaining positivity, connecting at heart level, being fully engaged with the speaker, providing only positive support, and being open to acknowledgment or support and accepting it by saying thank you.

Combining sharing circles with individual interviews can provide another dimension to the data and also allow those who may not speak up in a group situation the opportunity to contribute their voice. The sharing circle did not prompt as much discussion as hoped. It appeared that many were not comfortable answering the questions or discussing their thoughts in front of others even when we went person to person.

3.3.5.2 individual interviews.

Next, this writer completed semi-structured interviews with 15 youth. These interviews were important so that they were able to share information about the process of creating a

winter count along with information about their pictographs. This approach was particularly important because during the sharing circle several of the male youth made faces and blew kisses and made others laugh. The semi-structured individual interviews took place at the school in the teaching assistant's room. This room provided a quiet, private spot to talk about the winter count and the process of creating and sharing their knowledge. Interview questions were designed to explore the beliefs and perceptions of contributors to health, cultural safety, and the use of winter counts as a culturally respectful method for facilitating knowledge transfer (Appendix H). Open-ended questions were used to begin the discussion, and other questions were used to elicit clarifications, further explanations, and prompt more explanation. Benefits of individual interviews include the ability to learn about people's subjective experiences and attitudes, as well as the flexibility to change the direction in order to clarify or delve deeper into a subject (Streubert, 2011a).

“Interviewing is an active process where interviewer and interviewee through their relationship produce knowledge” (Kvale & Brinkmann, 2009, p. 17). Exploration and production of this knowledge involves “an inter-change of views between two persons conversing about a theme of the mutual interest” (Kvale & Brinkmann, p. 2). Similar to this interview process, relationships and establishing rapport are essential in an Indigenous research paradigm; this imperative places both the research participants and the researcher within a circle of relations (Wilson, 2008). Knowledge is then actively created and socially constructed with the interviewer and the interviewee as co-creators (Kvale & Brinkmann).

During the interviews, the youth were asked about the purpose of a winter count both in the historical and contemporary contexts. Storytelling and discussion were used as methods of sharing their winter counts. Traditionally, the winter count keeper would utilize narratives to

share the meanings of the content of the winter count. Not only did storytelling share what is included on the winter count, but it also served as the instrument that delivered their beliefs in the context of their lives. Oral traditions also represent a unique way of knowing, reproducing, preserving, and conveying Indigenous knowledge (Hulan & Eigenbrod, 2008). Combined with visual images, these stories add another stratum of understanding about the lives of these First Nations youth.

3.3.5.3 medicine wheel sharing.

Sharing also involved group analysis. This process began with a lesson on the medicine wheel. Elder Beverly Yuzicappi created a medicine wheel, explained its purpose, how it could be used to look at health, and gave examples of what each part of the whole meant in daily life. The medicine wheel included physical, mental, emotional, and spiritual components. Each of the youth was given a set of photographs of each of their individual pictographs. They were asked to place the photos on the medicine wheel where they felt that picture best represented that part of health. Once this activity was completed we discussed the photographs and how they fit within each component.

Following the medicine wheel sharing, each youth had the opportunity to share their winter count with both the Elder Wayne Goodwill and Elder Beverly Yuzicappi, and their classmates. It was interesting during the sharing session how Elder Wayne Goodwill took time with each youth to ask about their pictographs and commented on how many of them related to the “old ways.” For example, when discussing pictographs showing that the youth and their families have moved between houses and/or communities, he commented “that is just like we used to do in the old days, we moved around.” As I reflected on this comment, I could see how, from my Western perspective, moving is construed as being uprooted, a negative thing to

happen, whereas from a non-Western view, it was a representation of historical or necessary activity.

3.3.5.4 elder interviews.

To capture the unique perspective of the Elders, they were invited to participate in the sharing circles as facilitators, participants, or observers. In addition, they were invited to take part in individual interviews. Within a First Nations context there is an implicit connection of past to present to future. In this research, the Elders have been a focus, as well as a conduit to entry into the world of winter counts. They continued their engagement throughout the research and brought meaning and knowledge to the youth and researchers. Elders are the knowledge keepers and represent a continuity with the past (Hunter, Logan, Goulet, & Barton, 2006). In Aboriginal communities, “Elders are the critical link to Aboriginal epistemology through the Aboriginal languages” (Battiste, 2000, p. 201). In this research, Elder Wayne Goodwill was key to establishing this program of research and inspiring the use of winter count as a methodology. Both Elders were interviewed by the community researcher following the interview guide (Appendix H) and their contributions were included in the analysis.

3.4 Revisioning

Revisioning is not a final step or even a step that has a temporal component. It is interwoven throughout the process, as we change, and as we learn what works well and what does not. It happens through listening, observing, and reflecting. Reflexivity was about questioning our beliefs and assumptions, acknowledging partiality, and reminding ourselves that we shape what we see. In continually acknowledging the partiality of one’s perspective, we question what might be an alternate explanation, how can this be strengthened by exploring other perspectives, and asking ourselves if we are seeing with both eyes.

Revisioning also includes making sure that our process is inclusive. Inclusion took time and dedication especially when working with partners who already have multiple roles within the community.

The community I work with are Dakota peoples. Although they identify as Dakota peoples, it is imperative to note that the community is in no way heterogeneous in their cultural beliefs. Many of the knowledge keepers that I worked with have been raised in very different circumstances which potentially affects their values, beliefs, and practices. The same can be said for the youth who come from different places, different practices, different families, and different backgrounds. This diversity can be a benefit as it will increase the breadth of the findings and their transferability to other youth. In hindsight, it would have been beneficial for everyone involved to learn about Two-Eyed Seeing, as it could have opened up more discussions about differences and similarities.

3.5 Data Analysis

According to Morse and Field (1995), creativity is key in data analysis. It is an active process that begins with immersion in and familiarity with the data (Morse & Field). In qualitative research this requires the use of several cognitive processes: comprehending, synthesizing, theorizing, and recontextualizing (Morse & Field). Data included in this analysis were the interview and sharing circle transcripts, the winter counts, as well as notes and memos that had been kept.

3.5.1 notes and memos.

Notes were kept throughout the research process. These notes have been an important part of the data. They provided an opportunity to construct a multi-dimensional picture of the context of the research, as well as an opportunity to document feelings, thoughts and

observations. Also included in these notes have been observations, questions, decisions, thoughts about how the research would proceed, and notes about contacts with community members.

3.5.2 winter counts.

The winter counts have been included as data and cannot be separated from their stories. This approach was necessary to be respectful of their meanings and the connection between the oral and visual data. Each winter count was photographed, and the original hide remained the property of its creator.

3.5.3 analysis process.

The interviews and sharing circle were recorded, videotaped, and transcribed verbatim. Photographs of all completed winter counts were taken. All data (interviews, sharing circle, notes, photographs of the winter count, and photographs of the process) were entered into NVIVO™ qualitative software. Photographs of each pictograph were matched with the appropriate transcript and kept together as one piece of data. Memos were made as I reviewed each transcript and photograph. Memos documented thoughts about the data and notes about the photograph or discussion. For example, notes were taken during the sharing circle and I noted actions that were distracting. Photographs that were taken during the process of creating and learning were noted with observations or thoughts, such as whether the youth was excited to create or had a hard time starting to create. There were several notations about the excitement of the youth when they received their own hides for creating and how many took great care deciding on and selecting their hide. `

Analysis began with reading, re-reading, and viewing the videotaped interviews. During this reading and re-reading, initial ideas about coding categories were developed. The first round of coding contained topics that emerged from my initial readings. Some examples of these topics

include culture, education, friends, success, sports, story of me, and story by me. These topics were not mutually exclusive, and some passages fit into two or even three topics. During this time, I also looked for whether the topics would best answer the research questions regarding wellness or the process of creating a winter count.

Following this initial coding, I began to think about what each topic might mean and how each fit into the whole of what the youth said. It was also at this point that I provided Elder Beverly Yuzicappi and Mrs. Tawiyaka with printouts of the topics I initially coded along with the pictographs that matched each passage. We met and discussed the categories and planned to meet again to discuss further. I asked them to provide clarification, additional information, and correct misinterpretations. The involvement of community team members offered new perspectives and ways of understanding the data, as well as generated discussion. Because the community members come from within the defined unit of identity, or community, they are likely to share common symbol systems, shared values and norms, mutual influences, common interests, and commitment to focusing on shared needs (Streubert, 2011a).

3.6 Ethical Considerations

This research was approved by the University of Saskatchewan Behavioral Research Ethics Board. An information package (Appendix G) that included information about winter count, a parent/guardian letter, participants consent form, and confidentiality pledge was handed out during the recruitment presentation. Each participant was required to give consent prior to participation in the study. This research followed the OCAPTM and TCPS2 principles, as well as the research policies from the University of Saskatchewan. These principles and policies were incorporated through community engagement, collaborative research, respect for persons, culture, and community, and that the research was mutually beneficial.

3.6.1 community engagement.

The process of community engagement with Standing Buffalo Dakota First Nation began approximately 13 years ago, prior to this author's involvement. Chief and Council were identified as the formal leadership and were engaged in several discussions before they decided to partner with the interdisciplinary research group. As formal leaders, they were able to identify key members to participate in discussions about community wants and needs as they related to research. The program of research began with a series of community meetings and sharing circles that involved members from Standing Buffalo Dakota First Nation, First Nations University of Canada, and the University of Saskatchewan (Petrucka, Bassendowski, Bickford, & Goodfeather, 2012). From these meetings and sharing circles came a co-created research program titled *Okanku Duta Amani—Paths to Living Well* for on-reserve youth that sought to “build knowledge from a First Nations/Aboriginal lens” (Petrucka et al., 2012, p. 145). Since this time the research has continued to evolve focused on this goal and based on both the findings from previous research and the changing needs of the community. The proposed research is an extension of this previous research and the use of winter counts in research came out of this partnership, although it had not been fully explicated during this journey.

The community meetings and sharing circles were not the end to community engagement, but the beginning. Since the beginning, meetings continued to be held with stakeholders, previous research participants, community members, university partners, and Elders. These periodic meetings served to reflect on previous research, ensured the needs of the community were met, reevaluated priority needs, and planned for continued collaborations. Other activities of engagement included attending and assisting with community events, meeting with members for coffee or lunch, bringing in a curator from the Smithsonian to speak to the

community, and holding celebratory feasts that coincide with the beginnings and ends of several research projects. During these events the team engaged with members who may not have been directly involved in any of the research projects, gotten to know the people and the community, and engaged in dissemination activities. This multi-layered approach allowed for those who may not have had a voice in the research, or those interested in participating to meet the research team. These informal discussions allowed the research team to recognize the diverse interests that exist in the community.

3.6.2 collaborative research.

The proposed research was conducted within a partnership. Partners included the Chief and Council, Elders, community researchers, participants, and the community at large. As partners, they were involved in the decision-making process, and have had input into all stages the research. Involvement of a community researcher has been a key part of previous research with Standing Buffalo Dakota First Nation. The community researcher was involved in all stages of the research - from planning to action and dissemination. Her role included advising about community rules, roles, and expectations, planning the research processes, providing Chief and Council with updates, and organizing meetings with Elders, participants, and others as needed. She also conducted interviews with the Elders and teacher.

The TCPS2 recommends the research process be set out in a research agreement prior to recruiting participants. They advise the research agreement should include the expectations of the research, level of participation and engagement the community wants, community resources available for the research and processes for decision-making and conflict resolution. It should also discuss expectations regarding dissemination, costs involved in participation (both time and money), protections for privacy and confidentiality, and protections for the data. In the past this

community has declined to enter into any formal written agreement and has instead used discussion and periodic meetings as a way to monitor the processes. In the beginning, Leanne Goodfeather requested only a written proposal that outlined the research. As changes in leadership occurred, the research proposal and ethics information were provided to a new contact person.

In CBPR, dissemination is intended to bring about action aimed at improving the lives of the participants. Participants and research team members collaboratively decide upon dissemination strategies, what will be shared in the dissemination process, and whom it will be shared with. Another important ethical consideration related to privacy. Because the community is small it could be identified by releasing information about its location, its Nation, or other characteristics such as the school the participants attend, or, even perhaps, information about cultural activities. As part of the ongoing process discussions took place about which information would be released and the need to have participants' approval on what information is presented or published. It is possible that the youth could decide they wanted to be identified and every effort was made to accommodate.

Collaboration in research also sets out the process for the community to assert their rights of self-determination and self-governance through the OCAPTM principles. Control was asserted through the collaboration process and decided upon by those involved in the research planning and periodic reviews, as well as during the consent process. It was at that time participants were made aware of their right to withdraw their information at any time.

Access and possession were also considered in the decision-making processes. During the research it was anticipated that all the data would be in possession of the researcher until the research was completed. Considerations in this ethical process were about how to integrate

institutional policies for data storage with the principle of possession. University of Saskatchewan policy states that data must be kept for a minimum period of five years following completion of the research. One option to meet both requirements is to have two sets of data: one at the university and one with the community. After five years, the University of Saskatchewan files will be destroyed per policy and the community will be notified when this happens. The Elders council will be approached once this study is closed about the most appropriate handling of the data.

The principle of possession is also included in the TCPS2. They recommend use of a possession agreement that contains statements that cover the use of data before, during, and after the research is completed. Both of these requirements for possession can be met within the processes of CBPR and through collaboration with the community. This discussion will be included as part of the process research ends.

3.6.3 respect for persons, culture, and community.

The TCPS2 outlines several requirements that relate to respecting persons, culture, and community. These requirements include ensuring that those who may be considered vulnerable or marginalized have the opportunity to participate, seeking approval from all appropriate authorities, informing oneself about relevant customs and codes, ensuring that privacy and confidentiality of the participants are protected, addressing any potential risks through the collaborative process, and recognizing Elders and other knowledge holders.

Respect for persons and community also includes respect for privacy and confidentiality. Communities as partners bring unique ethical considerations, especially in a small community that encompasses one geographic area, such as a reserve. Ensuring privacy presents some challenges. Participants are often related, attend the same school, and participate in the same

extracurricular activities, and, because research involves meeting within the community, they are also seen attending research meetings. From previous experience utilizing photovoice in this community, one can anticipate that the youth who are involved will also be known to each other and to the community at large. This risk was identified during recruitment and suggestions were sought during the collaboration process on whether the community and participants see this as a risk and what actions can be taken to reduce this risk. The concept of confidentiality was explained to the participants during the consent process and they were asked to consider and sign a confidentiality pledge that explained what is confidential and how confidentiality can be protected.

Respect for community customs and codes of practice is another TCPS2 principle. During previous research this respect involved community feasts and prayers to begin and end the projects. This principle was followed through the inclusion of Elders and formal leaders, such as the Chief and Council members, as well as through the use of a method that showed respect for First Nations ways of knowing and sharing knowledge. The use of methods that recognize and incorporate local knowledge is another element of respect. This research involved the use of winter counts, which are a traditional way of keeping and sharing knowledge by the Dakota Nation. Traditional knowledge is defined by the TCPS2 as knowledge that “is specific to place, usually transmitted orally, and rooted in the experience of multiple generations”(CIHR, NSERC, & SSHRC, 2010, p. 108). Traditional knowledge “may be expressed in symbols, arts, ceremonial and everyday practices, narratives and, especially, in relationships... It includes preserving knowledge created by, and received from, past generations”(CIHR, NSERC, & SSHRC, 2010, p. 109). We engaged Elders through ongoing discussions regarding what is considered traditional knowledge and what knowledge should not be shared publicly. Any

additional clarifications were and will be sought about the sharing of cultural or traditional knowledge prior to all publications and presentations.

The inclusion of Elders in all phases of research was essential to ensure the research was respectful of community protocols, norms, and expectations. Elders provided advice throughout the planning and conducting of the research, as well as in understanding and interpreting findings within the cultural context. As in previous experiences with Standing Buffalo Dakota First Nation the inclusion of at least two Elders is required: one male Elder and one female Elder because of the unique considerations with the Dakota language and traditions as they relate to gender. The inclusion of several Elders also provided alternate perspectives in the research.

The OCAP™ principle of ownership is also about respect. It is recognized that data, in any form, ultimately belongs to the community and how this principle is asserted is always decided by the community. Respectful representation is an extension of this principle and is integral for showing respect for persons, culture, and communities. Because the data and the findings belong to the community, how they are represented in presentations or publications must always consider whether the community is being represented in a manner that empowers, respects, and honours the community and its members, or if it harms the community by portraying it in a negative manner. The decision about how and what findings will be presented must always rest with the peoples that it represents.

3.6.4 mutually beneficial.

The TCPS2 states that the research must be beneficial for the community, extend the boundaries of knowledge, and build research capacity at the community level. In previous research with Standing Buffalo Dakota First Nation, benefits to the community have evolved organically from the research. These benefits would not have been possible without the support

of a research team that have remained flexible, embraced creativity, and showed a commitment to the community and to ensuring that the community benefits in as many ways as possible. Previous offerings by the research team have included contributing to the annual summer culture camp, co-developing and co-delivering a culturally respectful wellness program for youth, bringing a curator from the Smithsonian to talk to the youth about the importance of art and identity, and supporting youth participants in empowerment activities.

There are and will be benefits for both the community and the researcher from this research. There has been interest from the Chief and Council, community members, and the community school about how winter counts could be adapted as part of the curriculum for cultural knowledge, as well as for health and wellness programming. One of the objectives for the research was to review and renew the winter count legacy in the community through the youth and to build capacity within the participating youths to create and perpetuate the winter count.

The focus of this long-standing research partnership has always been about understanding wellness and contributing to a healthier community. The proposed research will also contribute to this knowledge at the community level because it will be asking the youth to examine their life and contributions to health and wellbeing through winter counts. This information can be utilized for planning health promotion activities at the community level. Healthcare providers will also be better informed about health from the perspective of the youth in the community.

There are several anticipated benefits for this researcher. Academically, this research is proposed for the completion of a PhD in Nursing and will also involve publishing findings and the possibility of academic advancement. On a personal note, I engaged in this research as a grandmother that believes that my grandchildren should have the right to lead a healthy life, and

despite health advancements, based solely upon ethnicity, not everyone has the same opportunities for health.

3.7 Rigor

Validity is a dynamic “communicative, pragmatic concept” situated in the temporal and historic context of the community and, as such, is not able to be held to the same rigorous tests of validity as research done in the positivist or post positivist paradigm (Lincoln et al., 2011, p. 120). Instead, to assess validity in CBPR, Lincoln, et al. (2011) proposed several criteria on which to judge the goodness or quality of the inquiry. These include “congruence of experiential, presentational, and practical knowing,” findings developed through co-creation and dialogue, transformative ability of the knowledge, and inclusion of participant action (p. 108). In CBPR the researcher seeks to combine foundational or basic knowledge with experiential knowledge, and through the use of theory and pragmatics, achieve a whole greater than its parts (Altheide & Johnson, 2011). In this research, ways of knowing were a primary focus. It brought together ways of knowing and being from nursing, with traditional, cultural, local knowledge to co-create new understandings.

Rigor can apply to the application of the method as well as to the interpretation of the data (Lincoln et al., 2011). Without a clear agenda, the rigor of the inquiry can be impaired (Baiardi et al., 2010). Evidence to establish trustworthiness includes accounts that “demonstrate emergence and enduring consequences of actions or policies,” and show how pragmatic issues, questions of significance, or inclusion of different ways of knowing were handled (Altheide & Johnson, 2011, p. 583). This process of reflexivity needs to make biases and assumptions visible in order to identify potential threats to validity. One way of achieving this was through continued reflection, examining oneself, and conversing with team members.

Antithetically, the involvement of the community in CBPR can simultaneously contribute to and hinder validity of the study. Strengths of community involvement lie in the pragmatic knowledge they contribute to understandings and the language they use to describe their knowledge as representative of the social and historical context of the community. Limitations include the possibility that individuals may bring their own agenda into the research and may manipulate the process in that direction, reducing the legitimacy of the findings. Constant awareness of personal agendas and well-defined goals reduced this risk. Strengths were enhanced through open communications and being respectful of and encouraging the participation of a range of community partners.

Several strategies were undertaken to enhance the reliability and validity of this study. Reliability in qualitative studies is concerned with whether or not “the researcher’s approach is consistent across different researchers and different projects” (Creswell, 2009, p. 190). Strategies related to reliability included ensuring processes were documented and followed and ensuring interviews and sharing circles were transcribed verbatim. Historically, this rigor in research has not always been the case for Aboriginal peoples in Canada, where historically research was used to propagate colonial cultural bias and secure the dominant place of the colonizers (Absolon & Willett, 2004).

Qualitative validity also involves assessing the trustworthiness of the findings (Creswell, 2009). Strategies that were incorporated in this research include using multiple sources of data, providing opportunity for feedback during the debriefing session with the Elders, participants, and team members participating in the analysis, practicing reflexivity, and presenting findings that include detailed descriptions and represent the voices of the participants. Qualitative validity is also enhanced through prolonged engagement (Creswell, 2009). Although the timeframe for

the creating and sharing was approximately seven months, I believe that over the last 12 years I have spent in a partnership with this community and the time I have spent learning about and sharing knowledge about winter counts within the community meets the measure for prolonged engagement.

Authentic representation of the winter count tradition and all lessons is another important consideration. In order to incorporate the cultural and historic purposes of the winter counts, the findings are presented as a whole – the narratives and pictographs are considered as one unit of data. Publications will also include the participant's own words to ensure interpretations are true to their intent. Another approach to ensure authentic representation will be to take the findings, as well as all publications and presentations, back to the participants and the Elders who are involved in the research for their approval.

3.8 Dissemination

Two dissemination activities beyond the community have taken place. The first was a poster presentation on 'Lessons: A Wise Practices for Research with Indigenous Peoples' at the Gathering for Miyo Mahcihowin in March 2018. The audience for this gathering included health sciences students, faculty, health professionals, Indigenous health service organizations, community partners, and key Indigenous stakeholders. The second activity was a Sharing Space at the 5th International One Health Congress in June 2018. This Sharing Space involved one youth sharing their winter count, two Elders, the community researcher, and myself. We were able to share information about the research; the youth was able to tell his story about creating the winter count and I was able to discuss the research process. The community researcher and the Elders were able to answer questions from the congress participants about a variety of topics related to winter count and Dakota culture.

There is ongoing work on a teaching package that will include information about winter counts, as well as learning activities for the classroom that will be used at the Tatanka Najin School. Other formal dissemination activities might include University presentations, guest speaking, conference presentations, or publications. Once this study is closed, a summary of the research, as well as lessons learned, will be presented to the Chief and Council.

Chapter Four

Lessons

I have made a conscious choice to use the word lessons as opposed to findings. Lessons more appropriately describes the relationships that evolved during this research project with the youth, Elders, community, and even the data. Data from winter counts, interviews, observations, and the sharing circle are reflected on and are the foundations for the lessons. This chapter is related to two objectives: a) to explore the utility, cultural appropriateness, and potential of winter counts as a visual research methodology, and b) to discover what these First Nations youth believe are important events in their lives that have contributed to their well-being and who they are.

4.1 Lessons About Winter Counts

This section will describe how the youth understood the winter counts, how they felt about the process of creating the winter counts, and what they believed about the usefulness and cultural appropriateness of using a winter count to share information.

Most of the youth had a good understanding of the purpose of winter counts in a historical as well as a current sense. Ramona⁶ highlighted the retrospective aspect of the winter count, and stated the “purpose was to tell stories” and “to think back.” Anonymous Youth white said he chose the main event from the year and enjoyed drawing pictures to share knowledge about himself, and that people could learn about his life through his winter count. While, Anonymous Youth blue described his winter count as a timeline of his life.

⁶ Each youth choose how they wanted to be identified. Several youth identified as anonymous, so in order to identify their unique contributions I added a colour to anonymous.

While creating the winter count it was observed that many of the youth had a hard time deciding what to draw to represent their years. The stories for the years were easier for them to decide on than their pictographs. Many youths explained that they did not want to make a mistake. They explained how they decided what to do and what their process was. For example, Ayds explained that he drew “the special things that happened in my life” and Ball is Life stated, “It’s pretty cool” and she liked “describing one thing that happened that year.” Anonymous Youth white liked drawing the pictures and choosing what represented the main part of the year. While another “fun” part was looking at all of the other hides and seeing the pictures and hearing stories (Dilly Bar). Zesty Taco stated he drew pictographs of things that were important to him.

When the youth were asked about the process of creating the winter counts, they all had positive remarks, with some choosing to draw a picture of them drawing or of their winter count to represent that current year (Deer Girl, Dilly Bar, Damon) (Figure 4.1). Ayds enjoyed using the ink on hide and several (Anonymous Youth white, Dilly Bar, Ball is Life) liked learning how to draw. Although there were lots of positive comments about creating the winter count, some could not find the words to describe how it was a good way to tell their story (Ball is Life). Some participants described having to think about what to draw or thinking about things that happened in the past as negative aspects of the winter count. Deer Girl stated “Uh, the reason we put winter counts because we’re making this for, like our memories that we have in the past and might good or might be bad. But it brings back so many good memories of my childhood.” One youth stated that the bad part was having to remember what happened that year. Deer Girl stated, “the bad part, I didn’t like drawing the bad stuff that I did but it had to come out anyways because I didn’t want it to be shy about it or embarrassed about it” but also recognized that by drawing and telling stories about the bad stuff could help another person learn. Anonymous Youth blue did not want

to put negative stuff on his and wanted focus on positive because he had “a tough life” and that the winter count was a “timeline of your life.” Hailey stated “you don’t exactly have to put, like, in your past if you have bad times, you don’t exactly have to share with anyone. You can just put what you’d like to.”

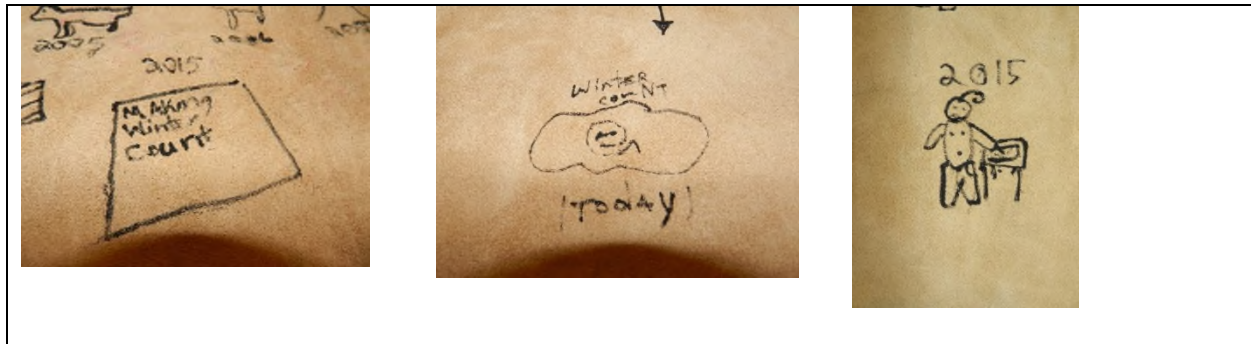


Figure 4.1 Three examples of pictographs representing creating the WC as their event for the year 2015

During the learning process, the youth were shown different traditional winter counts and a few contemporary ones. These winter counts were on hides, paper, and muslin or a similar fabric. They were created following different patterns: some went left to right starting at the top corner; some went in a circle; some decorated with additional drawings; and some had one or two pictographs to represent that year. Some used words or years in addition to the pictographs. One youth (Dilly Bar) said he chose to add some additional words on his winter count to help people understand more by looking at it as opposed to telling the story all the time.

Most participants felt the winter count represented their stories as told by them. Anonymous Youth green stated he started from when he was born “up until how I am now.” They consistently described the winter count as a story by me and of me “the origins of me” (Anonymous Youth green). Some felt that people would know about them just by seeing the pictographs. Anonymous Youth white discussed how people could learn about his life and his love for sports just by looking at the winter count. The winter count was a way for one youth to talk about an event that changed his life. He stated “Um, of how you can change your life from

growing up so bad and one little spark can just change your life. Forgetting about all the negative” and “All the sports just make you be what you are” (Anonymous Youth blue).

Anonymous Youth yellow stated “it’s a pretty spiritual way” when asked if he thought winter counts were a respectful way of doing research and does it respect First Nations ways of sharing. Many of the youth made the connection between the storytelling and the pictographs discussing how they needed a story to go with the pictograph in order for someone else to understand it.

When asked if the winter count was a respectful or culturally respectful way to gather knowledge most youth replied that it was, but found it difficult to explain the ways in which it was respectful. Youth were also asked, if a nurse wanted to learn about what is important for health, could it be learned using a winter count, and what could I learn from you. All youth agreed that a winter count would be a way for people to learn about them and what made them well and make suggestions for health promotion activities based on their stories.

4.2 What is Wellness?

4.2.1 medicine wheel analysis.

The first activity that was completed after the youth finished their winter count was a group analysis. For this analysis, each of the youth was provided with photographs of each of their pictographs. Elder Beverly Yuzicappi led this activity and began by providing an overview of the medicine wheel and the different aspects of holistic wellness. As she discussed the medicine wheel she provided examples of what each aspect looks like in life. In the centre of the wheel she drew a circle that represented fire and explained that “fire is something you can’t live without, air, fire, water. You always need it: we need the fire for warmth, to cook our food, no matter what we are doing, it warms our teepees, our houses.” The four aspects of spiritual,

mental, emotional, and physical represented on the medicine wheel are encompassed by the fire. Each aspect will be discussed and examples of what the youth included in their analysis will follow.

4.2.1.1 spiritual aspect of the medicine wheel.

Elder Beverly Yuzicappi stated that the spiritual aspect includes activities, such as going to the Sundance, going to services, going to church on Sunday, staying at home praying or smudging, or traditional activities like going to a sweat. Her description informed what the youth chose to put into this aspect of the medicine wheel. Events, such as receiving their spirit name, being born, attending school, participating in Sundance, spending time with family, and moving back to Standing Buffalo Dakota First Nation, were chosen as representing the spiritual aspect.



Figure 4.2. *Spiritual - Events that were selected by the youth as part of the spiritual aspects of their lives*

4.2.1.2 physical aspect of the medicine wheel.

The physical aspect appeared to be the most easily understood of the aspect of the medicine wheel by the youth. The youth had no trouble picking out which pictograph photos should go in this aspect and this aspect was quickly populated. Elder Beverly Yuzicappi advised that events such as dancing powwow, dancing Sundance, lacrosse (the Creator's game), baseball, hockey, and other things like moving camp or hunting buffalo were part of their physical self. Events that the youth chose were related to success in sports, participating on a team, camping, moving and travelling with family.



Figure 4.3 Physical - Events that were selected by the youth as part of the physical aspects of their lives

4.2.1.3 mental aspect of the medicine wheel.

Elder Beverly Yuzicappi explained that in the mental aspect “some of that comes to spiritually, when you smudge in the morning you pray for a good day and that is what you are hoping for. A good day – so when you come to school you’re happy, you say good morning, you

tell your body – you set your mind to something. Mental involves planning and positive thinking.” For this aspect, the youth chose events such as moving, a tornado that hit the community, education and achievements, being born, electronic gaming, and cutting your hair.



Figure 4.4 Mental - Events that were selected by the youth as part of the mental aspects of their lives

4.2.1.4 emotional aspect of the medicine wheel.

The Elder described this aspect of the medicine wheel by explaining “if you’re happy, but when you get up and you do that smudging, some get up really grouchy and ask the creator for a good day you can just get up and say I’m gonna have a good day, omakiya – [meaning] help me creator.” The pictographs the youth chose to place in the emotional health capture included their birth, moving, friends, family, and school.

4.2.2.1 physical activity as wellness.

Sports were the most prominent pictograph of the winter count. Both male and female participants identified with sports as part of their life stories. In fact, 13 of the 15 interviews featured sports as the most prominent part of their winter count. These sports included soccer, baseball, hockey, lacrosse, basketball, powwow dancing, skidooing (riding a snowmobile), and other unorganized physical activities. Importantly, the sports theme is closely intertwined with success as opportunity and relationships as opportunity. Their stories included ones about success, team work, friends, and travelling. Sports were something that you learned from and participated in with your family and represented challenges to be overcome (Ball is Life).

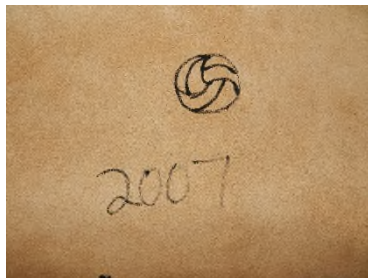
Lacrosse is the sport that appeared to have the biggest impact on the lives of many participants. When asked about the most important pictographs several chose pictographs relating to lacrosse and winning championships. When asked about the benefits of sports Anonymous Youth white, who had 8 years of pictographs (out of 15) related to sports, explained that “they keep you fit. They keep you busy away from other stuff.” He indicated that for him sports represented a way to stay away from drugs and alcohol and, for him that is what makes involvement in sports healthy. Here are the examples from his path.



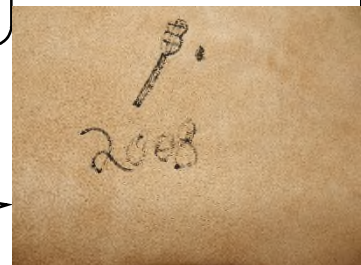
I started watching
a lot of hockey
here



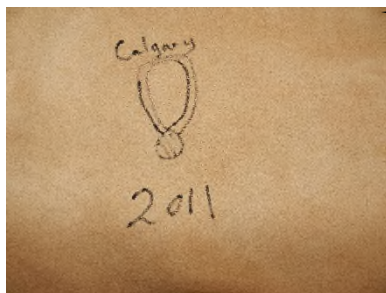
Education is important
to health – school, that's
where the sports are



Won a gold medal in
volleyball



I started lacrosse



Lacrosse in Calgary
– silver medal



Played lacrosse in
Regina

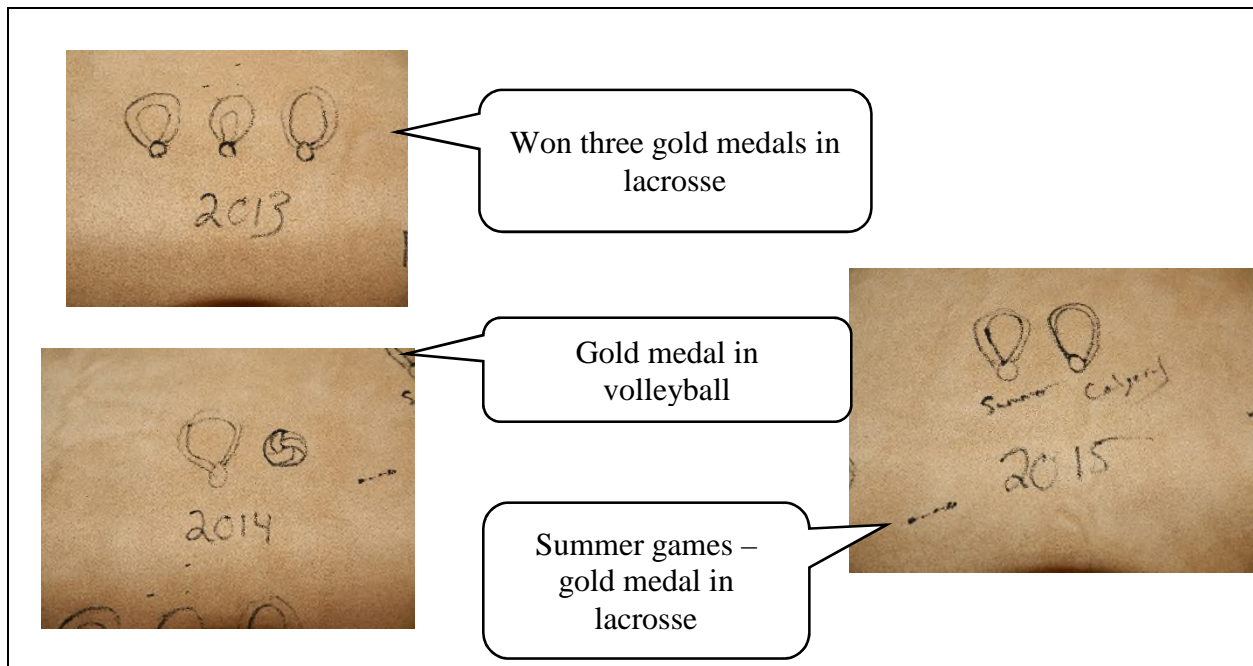


Figure 4.6 - examples from anonymous youth white – includes sports as the important event in 13 of his 15 years on his winter count

Sports was also identified with travel and new experiences. Youth who have been part of sports teams were able to travel across Canada as part of their participation (e.g. No Name – Toronto; Anonymous Youth white – Calgary. Ball is Life – Saskatoon, Calgary).

Sports teams also function as one’s social group according to the participants. Many youth acknowledged the importance of team work and making friends as part of the sports experience. For example, Deer Girl stated “then we made to championships, but we didn’t win. Because one of our team mates, they needed help, but we didn’t help them.” Ayds stated his pictograph was the most important one “because I got to spend time with my friends and we won a gold medal.” Hailey recognized sports as part of relationships as well, stating “the Standing Buffalo saying for lacrosse is you win big you lose big so when we lose, it’s like at least we tried. Like we don’t lose without a fight.” She was referring to the sense of belonging she had as part of the team.

Many youths agreed that sports were healthy. Various reasons included “because they get

you out of the house” (Anonymous Youth yellow), and “if you find a sport that you really like, and you focus on it” (Hailey). Hailey went even further to say “I got into sports and now my goal is kind of like a huge goal. I want to go to the Olympics in 2020. To play at volleyball.” This focus on sports impacts perceptions on importance of academics because “if you don’t get good grades and if you don’t listen in school, you can’t play.”

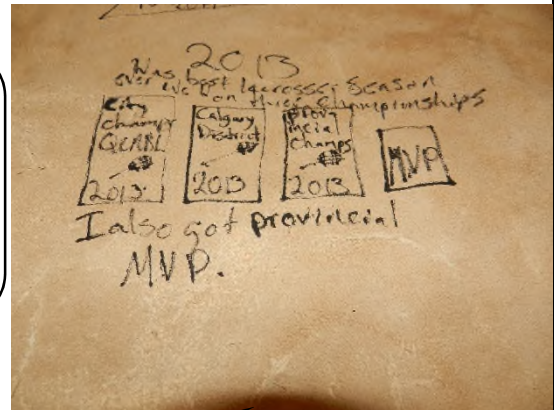
Anonymous Youth blue told the story of his life through his winter count emphasizing how sports and the coach saved his life – indicating without sports and a coach that supported him his life would not be as positive as it is. When asked about what someone could learn about his life from the winter count, he stated “how you can change your life from growing up so bad and one little spark can just change your life. Forgetting about all the negative.”

4.2.2.2 success as wellness.

This theme was also pervasive throughout the winter counts and the associated stories. All of the youth included achievements as part of their winter count. Some achievements included firsts, such as when they started Headstart or school, when they started to walk, or learned something new. The stories of success most often involved sports. Twelve of the youth had experienced success as part of a sports team. They included being selected as part of a team that had tryouts, winning medals, going to sporting events and games, working together with your team mates, and having a ‘first.’ During the interviews you could see their pride when talking about sports and achievements. Anonymous Youth blue stated that recognition is important and that you feel proud when you achieve.



"I went to summer games this year"
(Ramona)

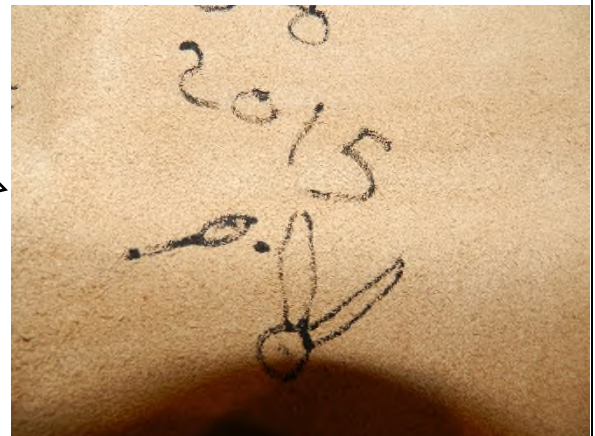


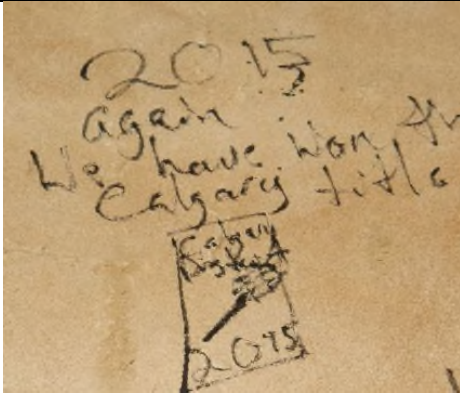
"was a good year, we won three championships. I got provincial and MVP" (Anonymous Youth Blue)

"we started playing lacrosse and then I scored my first goal.
We won a championship" (Ayds)

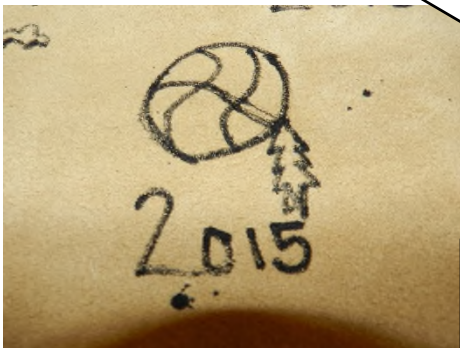


"D: If you had to pick the most important pictograph or the most important year that was kind of, been in your life, what would you say it is?
Ayds: 2015!
D: Because?
Ayds: Because I got to spend time with my friends and we won a gold medal."





"In 2015, we won the Calgary (lacrosse) title" (Anonymous Youth blue)



"I made it on to the all nations league basketball team" (Ball is Life)

"I travelled to different schools to go play...shoot hoops" (Jaylene)

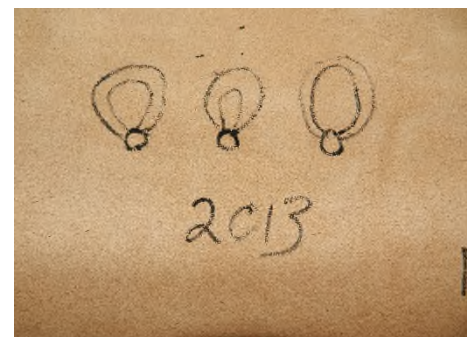


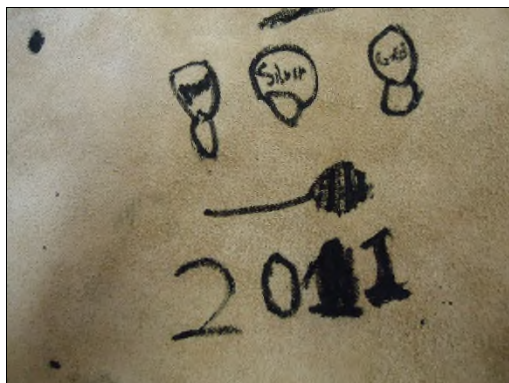
"won a gold medal in volleyball" (Anonymous Youth white)



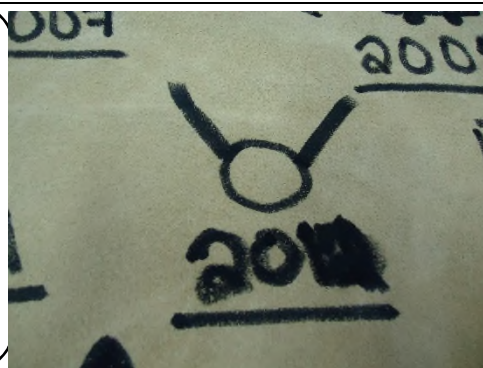
"I was in grade four and we had the, like some basketball free throw thing that I won and then we went to Balecarres and I won again and then we went to Regina but then I got second"

"won a gold medal in volleyball" (Anonymous Youth white)





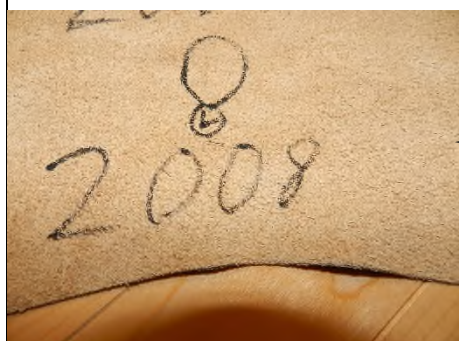
“Three medals in lacrosse – bronze, silver and gold (no name)”



“we got a FHQ gold medal for basketball. That was like my first actual medal when I was on a team”
(Hailey)

“We went to Calgary and we had imports like where other teams come and help us. Like if they’re doing good, they come in our team because we’re one of the good teams” (Deer Girl)

“we won the championship”
(Anonymous Youth red)



“this is where I won my medal”
(Anonymous Youth yellow)

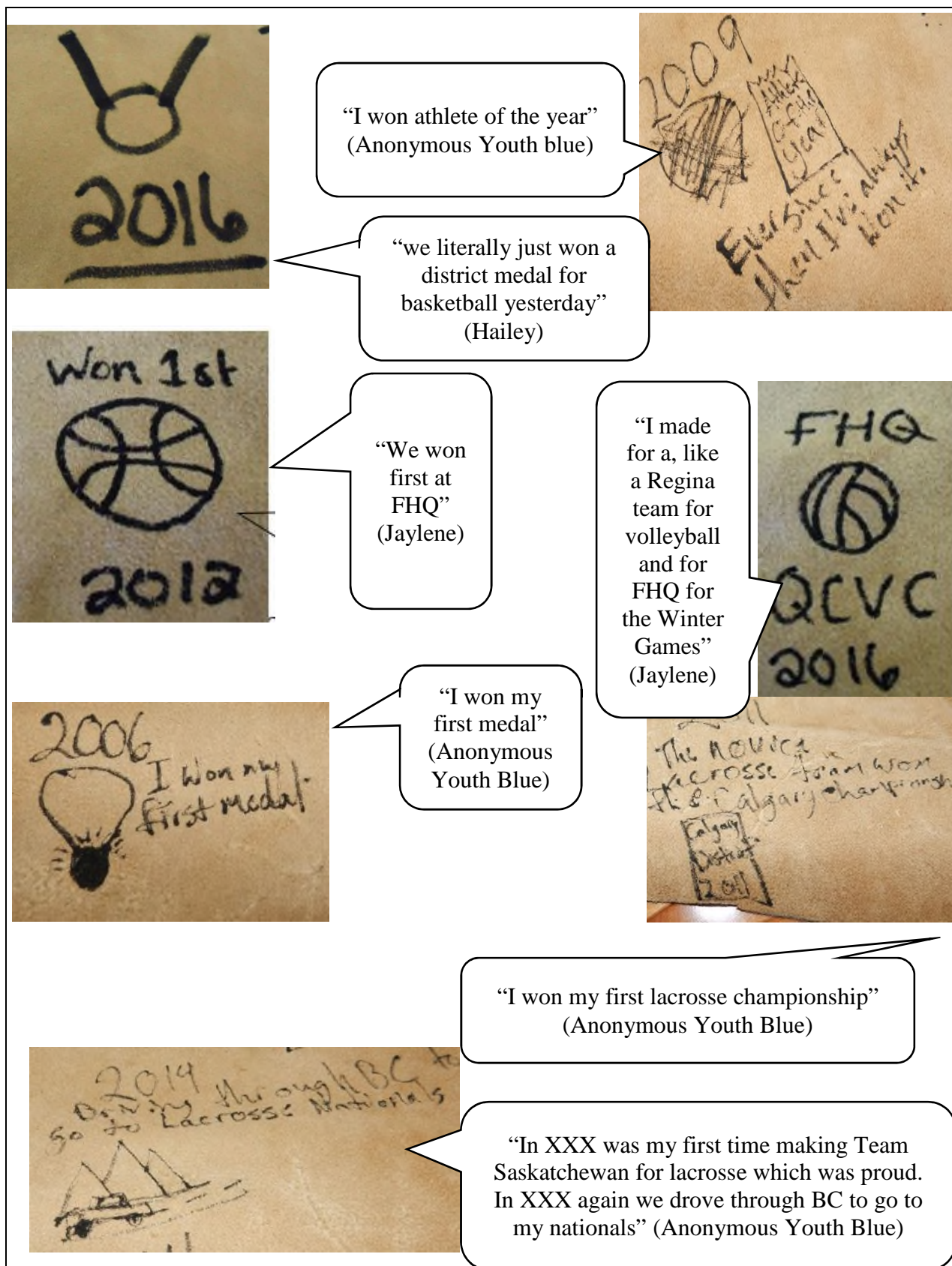


Figure 4.7 - Success as wellness as represented by the youth. Pictographs and quotes related to them

Success was also represented in academic achievements and perceptions that one is smart. Several youth chose these types of successes as their important event during select years.

Dilly Bar stated

Dilly Bar: There is just one school there that I learned so much, probably some adults didn't even know. Like I know how much soldiers fought in some wars and stuff. It was cool. It was my smartness. I forgot to draw brains so that was supposed to represent my smartness

Deanna: So, tell about your big brain? What are you going to do with it?

Dilly Bar: I want to become an engineer or a doctor.

Deanna: That's cool.

Dilly Bar: But then I want to become a doctor, but I don't want to become a doctor because you've got to experiment on like, dead bodies or whatever and I just...every time I see a dead body my heart just drops to my belly. It's kind of freaky. It just reminds of the inevitable.

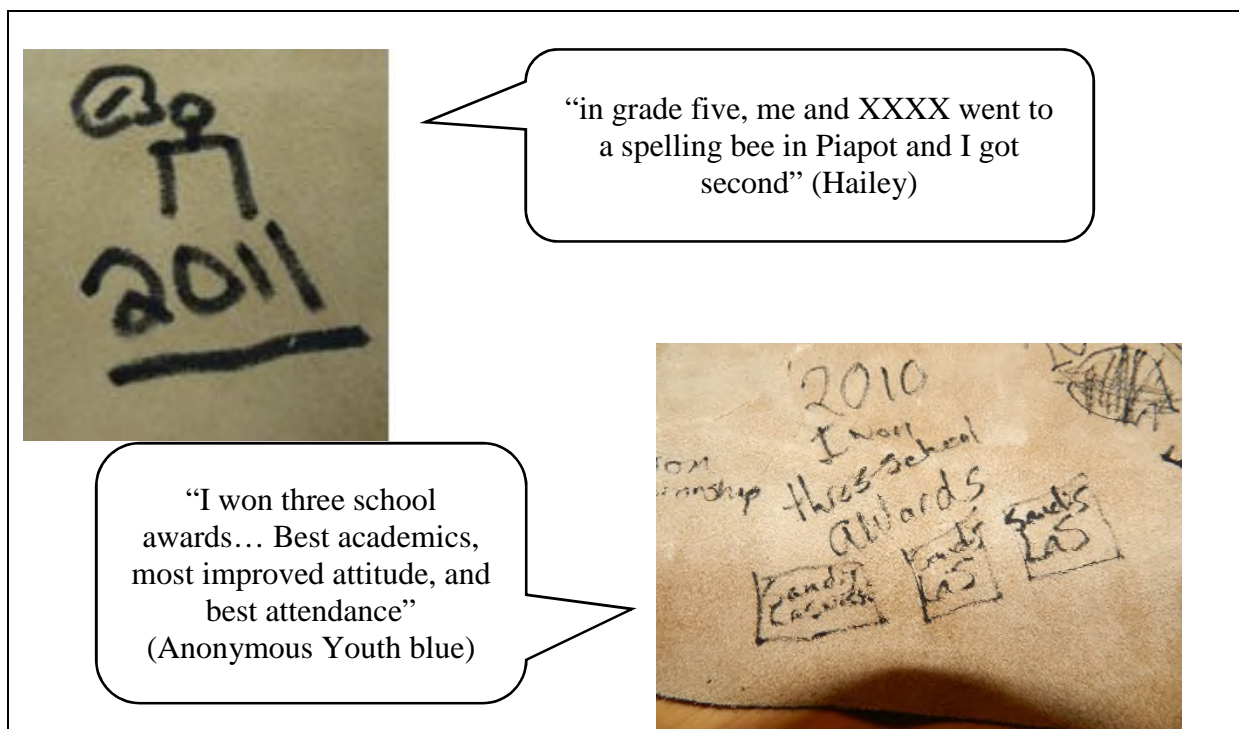


Figure 4.8. Academic Achievements - Two examples of academic achievements that were represented on the winter count as important events for that year

4.2.2.3 culture and spirituality as wellness.

Culture was included as something healthy by several of the youth. During the information session, Elder Wayne Goodwill instructed the youth how to draw their spirit name and that they should put it on their winter count to identify who it belongs to. Not all of the youth

had spirit names and they were advised to draw a symbol that they felt represented who they are. Some youth included their names because they felt it was important and some did not. Those who did not stated they did not know how to draw it, did not know how to say it, or just did not do it because they forgot about it. Before writing about cultural traditions or spirituality I was advised about what information is sharable and what should remain between the youth and me and not shared beyond research team



Ayds: And this is my Indian name.

D: and that is?

Ayds: Well using the eagle as a shield, that's a shield and an eagle

D: So not everybody put a spirit name on there. So, you put your spirit name on there because?

Ayds: It's important in my life.

D: Okay. In what way?

Ayds: Well many ways, because my Indian name is an eagle, so I come from the eagle clan so

I got my first spirit name

D: Okay.

DG: It was something with a deer.

D: How did you know it was a deer?

DG: Uh it was, um, tak she sea?

D: Tak she sea? And that means?

DG: Deer Girl

D: Deer Girl? Okay.

DG: Because I like to jump high and run fast. Um, after you become, like when you're born, you have a spirit name. They look at you and they see what you do with the medicine man and then when you hit the age of being a woman, you get another spirit name. Like a woman's spirit name that you have forever



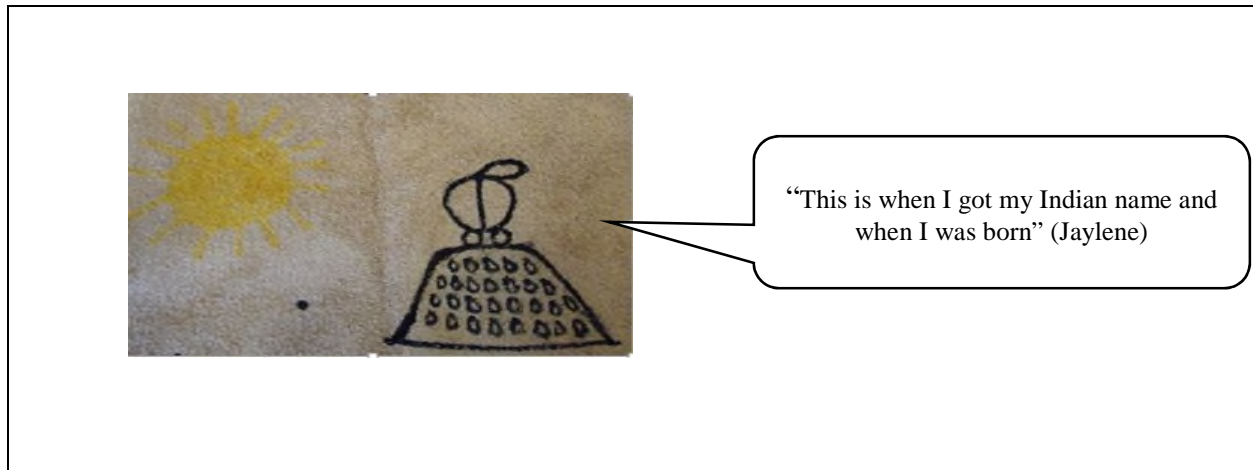
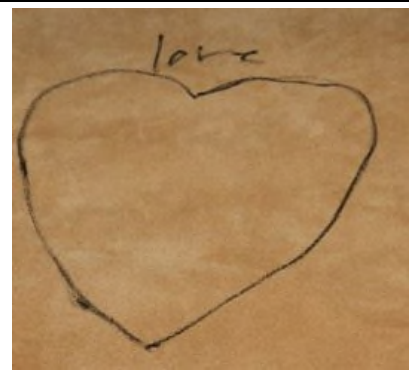


Figure 4.9. Examples of Cultural and Spiritual Pictographs. Three examples of a pictograph that represents spiritual names as part of their path to wellness

Instead of choosing to draw his spirit name or one symbol to represent himself, one youth chose to draw several symbols to represent himself. In discussion with him about these pictographs he stated that they represented who he was. The bear was his spirit animal and home represented where he likes to be. When creating his winter count this youth had drawn these symbols first and took several sessions to finish the rest of his pictographs. This youth was also very quiet and reserved during his interview.



“These represent who I am”

Anonymous Youth yellow

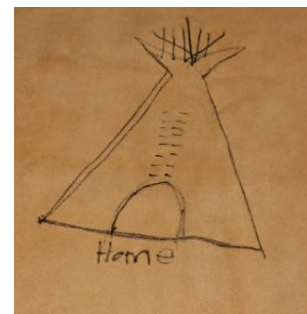
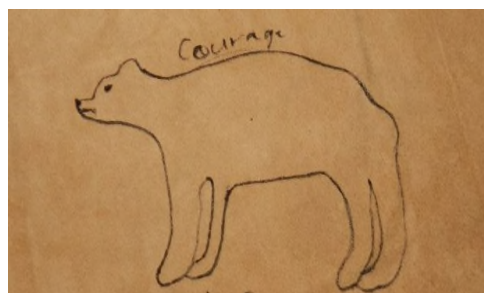
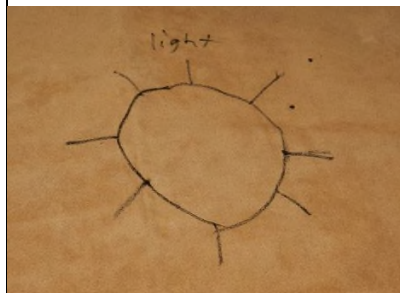


Figure 24.10. What I am. Anonymous Youth yellow used these pictographs to represent who he was

The youth also included other cultural activities that they participated in. Cultural activities that were of importance for Ayds included building a teepee, attending a Sundance, and receiving a pipe. Powwow and traditional dancing were also identified as activities that makes one healthy by some individuals. According to Deer Girl, “when you hear the music, the beat, you want to dance.” For Deer Girl spiritual activities included her roles in Sundancing as a tree chopper and pipe holder.





Figure 4.11 Traditional Activities the Youth Participated in. Top row, left to right, Pictographs by Ayds: building a teepee; attendance a Sundance; receiving a pipe. Bottom row left - Pictographs by Deer Girl: Being a tree chopper at the Sundance; Being a pipe holder at the Sundance

4.2.2.4 relationships as health.

This theme included stories and pictographs about friends, family, bullying, negative behaviors, separation from family, and moving (i.e., relocating). This theme includes both positive (healthy) and negative (unhealthy) behaviors, activities, and situations.

This story by a female youth exemplified the importance of family and acceptance by one's family for a youth. Even though she told a story about smoking tobacco and marijuana the story was really about how, when she was honest, her father was accepting, although disappointed, and ultimately, because she told the truth it strengthened their relationship.

Table 4.12 Two Stories About Relationship from Deer Girl

	<p>DG: “the smoking I was probably in grade five when I started smoking. My cousin, she, I was visiting here, and she told me to come outside so I went outside. It was summertime and her mom were gone. She was to the town for, like supper and got tipsy. She had a smoke, she had her mom’s smoke and she was just like, “you want a smoke with me?” I said no at first and then she just like, “come on, don’t be a little kid” and all that. “Don’t be a chicken”. So, I was just like, so I started smoking and then when her mom came back, like I got scared and I wanted to tell her but then my cousin said, “Don’t tell her, it will be just between us.” Then I went home and then I probably sat there a few days and I thought about it and then I told my dad what happened, how it all happened and then he was happy that I told the truth, but he was kind of disappointed in me that I started smoking. I told sorry and I got grounded for a few days but then he was, he said that it was good that I told him.”</p> <p>D: So, you didn’t smoke after that?</p> <p>“No.”</p>
	<p>DG: So, I was up there with my sister and my older brother and my older sister and then they said, they said, um, “if you want to, then come in the bedroom” So I was just like, I went to go see what they were doing. Because it was my first time seeing it.</p> <p>Deanna: Uh hmmm</p> <p>DG: I never saw it before. I was just like looking at it and they were like, peer pressuring me, and I didn’t want to do it because I know it was bad. But they still, they still asked and asked me and then they smoked it in a can and then they call it a bomb, they smoke it in there. And then I didn’t want to at first, so I sat back down and then they came out and they were like, here and they gave me, and I was just like, I didn’t want to, and they were like “here have the rest” and it was like, so I had a bit and like I started coughing and I felt weird. That’s when I sat there coughing, drink some water and I wanted to go back home but I had no phone. Yeah, the next day, my mom came back and then in the house it was all messy and she asked why it was all messy. And I couldn’t remember at first but</p>

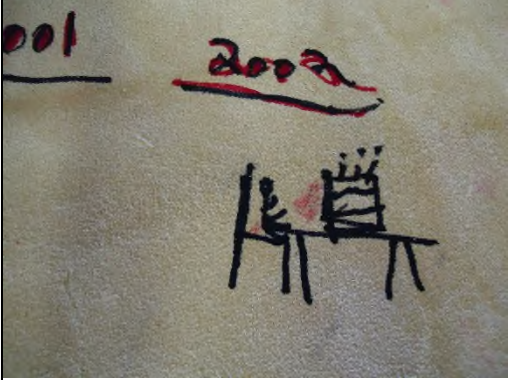
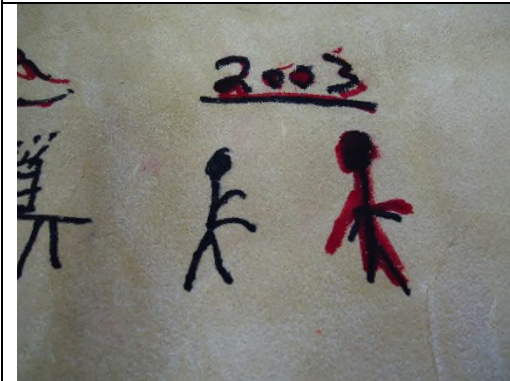
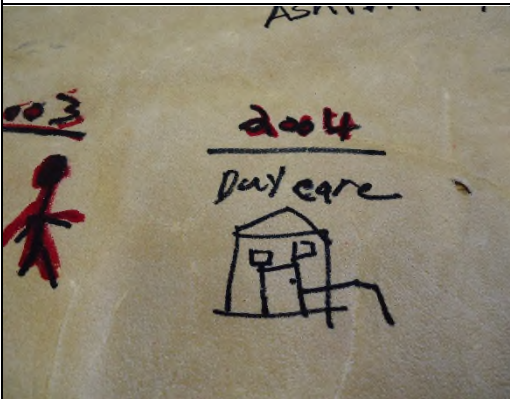
	<p>then when I went back home I started to remember that she forced, like she peer pressured me to doing it. Then I sat down and like a bunch of friends started coming so I wanted to go back home so I just sat downstairs in the room, where the thing, my sister's room and then her mom came back and there was like a bunch of, like cans, everywhere and the house was dirty, so they made me clean it up. While they like sat down and watched tv. Then I wanted to go back. And then when I went back home, my, I told my dad what happened, and he was like very disappointed, but he said it was good that I told him, but I shouldn't have done it first and I told him that they peer pressured me to doing it and I didn't want to do it and I wanted to come back home. So, we were grounded for a few weeks.</p> <p>Deanna: So, do you think it turned out better because you told your dad what happened or?</p> <p>DG: Yeah.</p> <p>Deanna: Yeah.</p> <p>DG: Because if it XXX it back, I wouldn't have so many lies back and he wouldn't trust me anymore and I wanted to trust my dad.</p>
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Figure - 4.12. These two pictographs and their accompanying stories are important examples of how relationships can be built even when negative behaviour occurs

Family were emphasized as important to health for several youth. Some pictographs represented teaching younger siblings, going places with family, visiting with family, and new siblings. Dilly Bar commented on how his siblings were important to him and his health and stated being an older brother “teaches me how to be a better role model and leader.” Anonymous Youth yellow also believed that his siblings were the most important influencers on his health because he cared about them. Not only did immediate family appear frequently in the winter count but grandmothers, aunties, and grandfathers were mentioned in stories about family or about learning.

Friendships were the relationships that most often came out in their stories. Several youths chose events that were related to friendships as their most important events on their

winter count (No name, Anonymous Youth white, Jaylene). Anonymous Youth green chose several important occasions that included friendship as their represented events in certain years. In fact, his suggestion for making programs that help youth become healthier was to focus on getting kids together and help build friendships.

	<p>“That’s when I had my first birthday party”</p>
	<p>“That’s when I met my best friend”</p>
	<p>Going to daycare meant he was able “to meet other people to have more best friends and friends to play with”</p>



	<p>“in 2005, when I started school in Regina, I just met other new friends that were XXX</p>
	<p>“And in grade one, I started school at Standing Buffalo and yeah I made a bunch of new friends, that I have now.”</p>

Figure 4.13. Anonymous Youth green chose to highlight now and when he met friends and made long-lasting friendships as what was important in his life. Important to note that this process took place over several years and was a significant enough story to tell over time

Friendships occur in many contexts. Anonymous Youth white stated, “I started lacrosse and [made] new friends here” and commented that friends contributed to health because ‘they do things together.’ Sports was also highlighted as a place for relationships to grow. Hailey stated “if you know everyone or if you get to know people and you all have a connection together, it just makes you stronger when you’re playing because you have the connection to everyone so that’s what lets you win.”

School was also an important place for friendships. Ball is Life stated that school was healthy because “that’s when I first started to make friends.” Dilly Bar stated “Social fits here. Socially active. Because if you’re not, you won’t be able to get good marks or whatever.” Zesty

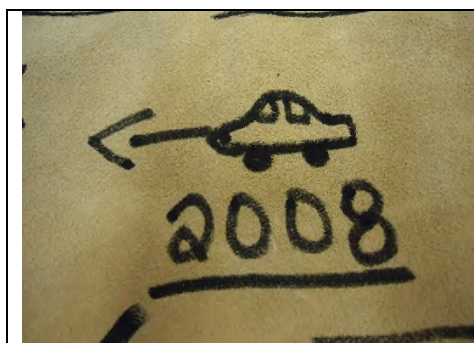
taco also made long-term relationships with friends in Headstart, kindergarten and Grade 1.

4.2.2.5 relationships as ‘dys’-wellness.

Moving/re-locating in reference to relationships was the second most prevalent content on the winter count. The moves appeared to influence their friendships, education, and feeling connected with peers.

When thinking about vulnerabilities, or situations that do not contribute to wellness, it is important to note that these are not weaknesses but represent opportunities for growth. I have made a conscious decision to not include names in this section as some of the youth were emotional when discussing some of the moves and the information may be sensitive. From the 15 youth who participated in the interviews there were 51 references to moving. Reasons for moving included moving to their own house, moving away from family, moving to family, moving because of family, separation of family, and placement in foster care. In several instances, some did not remember or understand why they moved.

The youth were impacted by moving in different ways. Some of the negative impacts were associated with being homesick, changing schools, missing other family members, changing schools, losing friends, having to make new friends.

	<p>“I was also in foster care for a year when I lived in XXXX. And then for like two months we got moved to XXXX in foster care. And then we got back with our parents and we moved here. But then my mom and dad were fighting so my dad moved back and now every year we have to choose who we want to live with.”</p>
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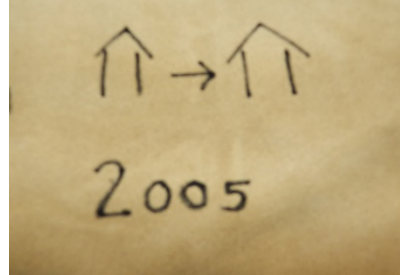




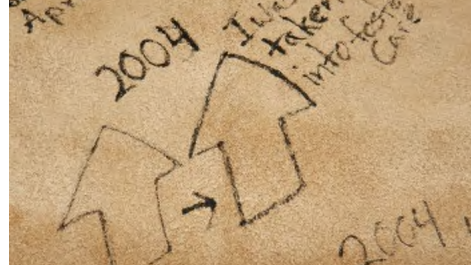
		<p>“unhealthy because you get homesick”</p>
		<p>“Because we were there for like two years and I missed all my family back in XXXX. I only had like one other family in XXXX”</p>
		<p>“I remember the exact date and time when we got back... It was important for me because I missed XXXX.”</p>
		<p>“You have to learn, meet a lot of new people and trying to get like, like a third wheel a lot. Because they already have got friends that they’ve known more longer than me. I think the longest friendship I’ve had was five years”</p>
		<p>D: So this is when you knew true happiness? “...when I moved back. My brothers, my mother</p>
		<p>“When I was three years old, my left me and my sister alone, we were taken to foster care</p>

Figure 4.14. Moving – Examples of references to moving and the comments that went with the pictograph that related to moving

Chapter Five

Discussion

5.1 Objectives Reviewed

The objectives for this research were a) to review and renew the winter count legacy in the community of Standing Buffalo Dakota First Nation through the youth, b) to build capacity within the participating youth to create and perpetuate winter counts that are tools for knowledge translation and transfer, c) to explore the utility, cultural appropriateness, and potential of winter counts as a visual research methodology, and d) to discover what these First Nation youth believe are important events in their lives that have contributed to their well-being and who they are today. This fourth objective was discussed in Lessons and will be addressed in Opportunities for Wellness.

During my literature review and research process another objective became clear to me. As I reflected on the research and the processes I wondered. Was it respectful? Was I doing the right things? How did I know that what I was doing was of value to the participants and community? As I explored the literature it became clear that there was a wealth of information about process, but there was a dearth of information that could provide me with the insights into my quest for a meaningful and respectful research journey/pathway. Going back to the objectives, I wanted to explore winter counts and to develop an understanding of what a culturally appropriate research method would entail. I have chosen to articulate my lessons and beliefs through a Wise Practices framework.

Winter counts were a way to build capacity with this group of youth as well as their families, teachers, and others at the school who showed an interest. When this project began only

a few people understood what a winter count was. It was Elder Wayne Goodwill, who introduced the research team to the winter count as a traditional art form and historical calendar. Our curiosity was peaked; we took some time to research the winter count (with a research team at that time) and then began exploring them as a cultural activity for a winter camp at the school (Petrucka et al., 2016). That curiosity has driven us as we moved forward in learning about the winter counts from Elders and cultural experts, exploring the literature, and sharing our experiences, to visioning, learning, creating, and sharing within this research.

Increased understanding of the winter counts was an outcome of this research that was achieved. All the youth who participated in this research were able to discuss the purposes and history of the winter count as well as what one might learn from a winter count. Work that has yet to be completed includes learning modules for the teachers at the school. It is anticipated that these modules will further review and renew this traditional activity in the community. This increased understanding is a process that has only begun. It is hoped the youth will continue to discuss and share their winter counts with family, peers, and friends.

The youth had a good understanding about the purposes of the winter counts in a traditional sense and also took ‘artistic license’ with their own winter count to personalize them to optimize their self-reflection/representation. One of the first lessons learned about the process was to be flexible in enabling creativity. At the beginning of the project the youths created a practice winter counts on a small piece of hide so they could get used to the ink and drawing with a nib. They were instructed by Elder Wayne Goodwill that if they did not have an Indian or Spirit name, they should draw a pictograph to represent themselves. One youth drew a pictograph of a brain and wrote “brain smart.” Had it not been suggested that they create a representation of themselves there may have been less self-expression. This level of self-

expression, seemingly given permission to be free in thought and design, continued throughout the winter count creating process.

When discussing the cultural appropriateness of the winter counts, many of the youth stated they felt respected, and were able to tell ‘their story.’ When one also considers the process of visioning and learning, which included many discussions related to the winter count, it clearly enabled the inclusion of cultural and historical knowledge. The winter counts became much more than an isolated activity but were part of the larger way of knowing and understanding the world through a cultural lens. Discussions, such as how one gets and prepares a hide or about how sports have been a large part of the history of Standing Buffalo Dakota First Nation and many of the youths’ ancestors had many sports related achievements, are some of the examples of how cultural dialogues and sharing were vectored by the creating process. No discussion took place in isolation without revealing other dimensions of living and being in the youth’s context.

The second objective was to learn about the role of winter counts in knowledge transfer. The winter counts were more than tools for knowledge transfer. They variably served as method, as data, and as a dissemination tool. As a method, the winter count is a visual approach aligning with photovoice, or body mapping. The method is straightforward and requires minimal expense or specialized equipment. The possibility to complete the winter counts on paper rather than on hide exists. The discussion about the preparation of the hide could still be included in the learning phase, so the youth would not lose that part of the learning. Undertaking a traditional method, such as winter count, requires time and commitment on the part of the Elders involved. Even though I had completed hours of research that included a complete literature review, visited the National Museum of the American Indian Archive Centre (Smithsonian Institution) on two occasions and met with the curator Emil Her Many Horses (who had also created his own family

winter count), I do not hold the cultural knowledge required to respectfully engage in this type of research without Elders.

This visual method is clearly aligned within an Indigenous research paradigm. During the interviews, the winter count served as a tool that prompted discussion and stories. They were a visual accounting of what the youths believed along with a tool that prompted discussion. The visual also prompted discussion as part of dissemination. For, example the research team were invited to present at a conference. The one youth who went and displayed his winter count was able to use it much like it would have been in a historical sense – he was able to use the pictographs to remind him of the story he would tell for a certain year, he explained about how he created his winter count, and was able to use it as a tool for knowledge transfer. It also became a tool for prompting discussion with conference attendees – they looked at the pictographs and asked questions about the pictographs as well as the history of the winter counts, the hide, and other traditional activities. In one of the pictographs there was a pictograph of a pipe. The youth explained about why it was important for him, which prompted questions about the pipe and culture, which prompted a story about how he received a pipe, which prompted questions about how to acquire a pipe, which prompted a story about the person who he received the pipe from. The winter count was the vector or the tool to build the dialogues. This aligned with the traditional purposes of the winter count as a tool that facilitated discussions and storytelling revealed beliefs about what was important and a method of preserving the youth's history.

Thirdly, we explored the utility, cultural appropriateness, and potential of winter counts as a visual research methodology. Opportunities for utilizing a winter count as a visual method are limited only by the imagination. I envision the winter count could be used in research as a

retrospective, longitudinal, or introspective method for knowledge transfer. The concept of recording your thoughts or beliefs through stories and visual representations is suitable for many purposes and well suited to research that explores lived experiences, perceptions, or perspectives. This is truly a living document; it shows one's path, exists in the present, and awaits the future.

Beyond research, I imagine the winter count has potential as a therapeutic tool. For example, youth might use the winter count to examine their past (life course) and highlight important events that led to their current circumstances or as a way to envision their futures. The pictographs could serve as prompts for discussion. They are an open canvas on which one can tell their truths - their stories for the purpose of sharing, remembering, reflecting, or envisioning.

They also have potential as an educational activity. With the learning modules that are being developed the teachers at Standing Buffalo Dakota First Nation Tatanka Najin school will have the information at their disposal to incorporate the winter count in a variety of ways and in a range of courses (i.e., history, social studies, language, culture or health and wellness).

So, I come to the point of reflection – are winter counts method, tool, or strategy? At this point the answer is YES. They are all of these and much more. So perhaps this is a major lesson – the winter count is an Indigenous method that challenges or transects so many of the non-Indigenous expectations/elements. It blends and integrates all the components into a seamless and dynamic method. We are not constrained by the rules or categories, but rather come to move freely to create a winter count which is simultaneous data, method, tool, story, analysis, dissemination strategy, teaching tool, and so on. So, what is the role of the winter count – it is for the participants, the Elders, the community, and those who are open to the knowledge to decide.

5.2 Wise Practices

The final objective was added during the research and was to develop an understanding of where winter count fit into a culturally appropriate research method. Are they considered culturally safe? Are they a decolonizing method? Are they respectful of Two-Eyed Seeing? What the literature search revealed was that there are no agreements on what is appropriate or the best for research and that different practices are context specific. What I have come to understand is that there is no one best method and all research requires researchers to be flexible, reflexive, respectful, and responsive.

In the literature, there are few references to Wise Practices, although it has been discussed and referred to in different contexts such as conferences, research, and practice guidelines (BC Centre for Disease Control, 2009; Nabigon & Wenger-Naibgon, 2012; Petrucka et al., 2016; Thoms, 2007; Wesley-Esquimaux & Snowball, 2010), but has not been considered as a framework for research with Indigenous peoples. If we return to the discussion by Thoms (2007), Wise Practices was proposed as an alternative to ‘best practices.’ For Thoms, these ‘best practices’ represented “a hierarchal, non-Aboriginal construct” and “marginalizes Aboriginal knowledge learned on the frontlines through socio-cultural insight, ingenuity, intuition, long experience, and trial and error” (p. 8). This document introduced Wise Practices as practices that are flexible, context specific, and inclusive of Indigenous people, and, in the case of Thoms, two-spirited ontology and epistemology. Wise Practices have been defined as “the integration of knowledge in order to provide the best help possible in a given situation” (Nabigon & Wenger-Naibgon, 2012, p. 51).

5.3 Wise Practices Framework

In research, I envision Wise Practices as a framework for research that is adaptable,

flexible, creative, reflexive, pragmatic, respectful, as well as culturally and locally relevant. The following discussion will identify values, considerations, and aspects of a Wise Practices framework. I chose to use the word Indigenous for this framework to represent the original inhabitants of the land as a broad term that includes First Nations, Métis, and Inuit peoples of Canada, as well as Indigenous peoples globally. This framework, just as in Two-Eyed Seeing, utilizes the strengths of both Western and Indigenous eyes. It is about “using both these eyes together, for the benefit of all” (Bartlett, Marshall, Marshall, & Iwana, 2012, p. 11).

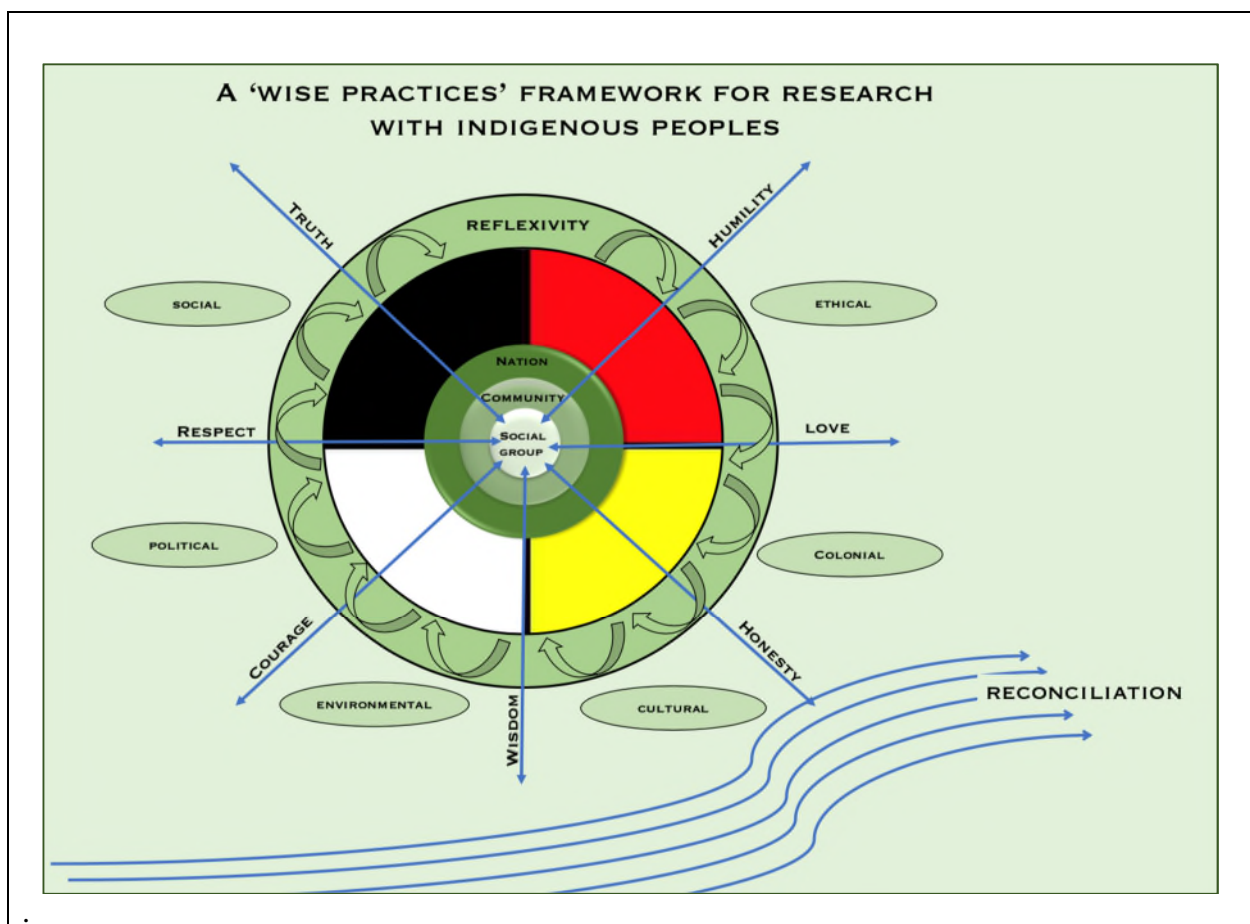


Figure 5.1 - A Wise Practice Framework for Research with Indigenous Peoples. This visual represents a 'Wise Practices Framework for Research with Indigenous Peoples.' A discussion of the values, considerations and other aspects will follow

Beginning at the middle of the framework is the social group. When I think about this part of the research process I also think about the fire at the centre of the medicine wheel that Elder Beverly Yuzicappi described as something that we cannot live without. In research, it is

the social group who is the central focus of the research. Although they are the focus we must ensure our commitment also extends to the community, the Nation, and all of Creation. The ripple we make at the centre will always extend beyond.

The background of the visual is a medicine wheel. The four quadrants can represent the four directions, stages of life, aspects of life, ceremonial practices, or seasons (Integrative Science, 2004). The medicine wheel represents ‘Wholeness’, ‘Change’, and ‘Balance’ (Integrative Science). The meaning in a wise practice framework is about achieving wholeness, balance, and change. It is about partaking in research that strives to make positive changes while ensuring we balance the objectives with the needs of the people with whom we work, live, play, and share.

5.3.1 Values in Wise Practices

Values in wise practices are based on teachings as taught by an Elder in a previous project (Petrucka, et al., 2016), tipi teachings (Saskatchewan Indian Cultural Centre, 2009), the seven sacred values or teachings (Wesley-Esquimaux & Snowball, 2010), and the seven sacred teachings of White Buffalo Calf Woman (Bouchard & Martin, 2009). These values (described below) serve as the foundation for the research relationship and are the spokes in the framework that support and tie everything together. Reflexivity binds it all together and is woven throughout the process. According to Wesley-Esquimaux and Snowball (2010), the grandfather teachings “maintain that there are seven qualities or values that a person should embody at all times to live a good and balanced life” and that those who live by them can find positive change and growth (p. 396). They describe the values as transformative, interwoven, and continuous.

Courage—to speak, to reveal, to reach out, to be open, to be introspective, **Honesty**—to know yourself and your own values, biases and beliefs, to speak from the heart and soul, to allow yourself to truly be seen, know and be known, **Humility**—we are all in this together and all have inherent value, no one person is greater than any other in spirit, we

are all ordinary and extraordinary beings, our greatest task is to learn to be of service, **Respect**—coming together and honouring each other’s place and space, knowing that this is something you must give to get, honouring the smallest to the oldest, walking in beauty, **Truth**—our truth is not the only truth, there are many paths to home, we are created equal, no matter how much we learn, there is much we do not know, creating **Love**—unconditional acceptance of self and other, accepting and embracing difference, allowing, and gracefully giving of everything we are, **Wisdom**—providing an expansive and inclusive view of the world. (Wesley-Esquimaux & Snowball, p. 396)

Courage is displayed when one does what is right (Bouchard & Martin). Honesty is about speaking the truth, seeing and accepting yourself as you are and accepting others as they are, and not wanting more than we have been given or not using the gifts of others as our own (Bouchard & Martin). Humility means “we are not above or below others and the circle of life. We feel humble when we understand our relationship with Creation. We are so small compared to the majestic expanse of Creation, “We are just a strand in the web of life,” and we respect and value life. (Saskatchewan Indian Cultural Centre, p.105). Humility includes understanding that we are only a small part of the whole that we need to contribute to the whole and not be individualistic (Bouchard & Martin). Respect is giving honour to others and “honouring other people’s basic rights” (Saskatchewan Indian Cultural Centre, 2009, p. 105), such that you never take more than you can use and giving the rest away and doing for others (Bouchard & Martin, 2009). Love is about “being kind and good to one another” (Saskatchewan Indian Cultural Centre, 2009, p. 105) and accepting yourself as you are and cannot be achieved without understanding and accepting others as they are, and living the other teachings (Bouchard & Martin, 2009). Wisdom comes as we learn, as one watches and listens; “knowledge can be learned. Wisdom must be lived” (Bouchard & Martin, p. 12).

5.3.2 Considerations

According to Merriam-Webster (2018) a consideration is “continuous and careful thought” or thoughtful regard. The considerations in this framework are based on the definition

of wise practices by Petrucka et al. (2016) and then expanded with considerations identified in this research. They include social, colonial, environmental, political, cultural, and ethical considerations. Each of these areas will be presented along with aligned considerations. This is not a linear process of checking off boxes and proceeding ahead, but iteratively and continuously involves critical thinking, consultations, reciprocity, engagement, and reflexivity. Being able to answer and contemplate this framework requires a high level of engagement, making it unsuitable for those who do not wish to fully engage with the community.

There are many reasons why a framework with considerations is necessary. Recurring socio-cultural and ethical issues in research are concerning. There have been data collected without consent, data misused, people treated as ‘sources’, disrespected beliefs, protocols, and “basic human dignity,” sensationalization, misrepresentation, negative portrayals, and appropriation and misuse of traditional or communal knowledge (TFNIGC, 2014). It is hoped this framework will contribute to reconciling these past wrongdoings and assist researchers in moving forward in a way that honours truths and seeks reconciliation.

5.3.2.1 social.

Social considerations examine the capacity of the group and focus on what it is they want to achieve or their short and long-term goals. For example, in this research, the focus was identified by the Elder and the teacher that I worked with. The Elder wanted to reintroduce the winter counts into the community as a link to their history and the teacher wanted the youth to have the opportunity to learn about their history.

Other examples of social considerations concern who has the skills or is the most appropriate person for the role. Research that examines ways of knowing or that includes working with Indigenous peoples must always have an Elder to direct, advise, and give

permissions. Elders are the knowledge keepers and without them the research may not be meaningful.

This consideration is also about relationship building. Relationships are social considerations which can significantly affect the research. One needs to ask how relationships are respected. This includes relationships to language, culture, other persons, and the world around us. Researchers must reflect on the relationship they have with the group. As stated by Elder Reg Crowshoe “everything was equal—plants, animals, the air, the moon, the sun, everything was equal...our authorities come from our ties to the land” (Truth and Reconciliation Commission of Canada [TRCC,], 2015a, p. 46). Those who wish to drop in, gather data, and drop out of Indigenous communities should look towards other research. Relationships are an important part of research and form the basis for research that facilitates learning.

How community is defined also needs to be explored. This question can only be answered by asking the community itself as there are many types of communities. Community has been defined as:

a collectivity with shared identity or interests, that has the capacity to act or express itself as a collective... [it] may include members from multiple cultural groups. A community may be territorial, organizational or a community of interest. “Territorial communities” have governing bodies exercising local or regional jurisdiction (e.g., members of a First Nations resident on reserve lands). “Organizational communities” have explicit mandates and formal leadership (e.g., a regional Inuit association or a friendship centre serving an urban Aboriginal community). In both territorial and organizational communities, membership is defined, and the community has designated leaders. “Communities of interest” may be formed by individuals or organizations who come together for a common purpose or undertaking, such as a commitment to conserving a First Nations language. Communities of interest are informal communities whose boundaries and leadership may be fluid and less well-defined. They may exist temporarily or over the long term, within or outside of territorial or organizational communities (CIHR, NSERC, & SSHRC, 2014, p. 111).

When reflecting on the community you are working with one must ask if there are participants that have been excluded from participation and what are the barriers that might keep community

members from participating in the research. These barriers might be circumstances such as transportation, time, and childcare. What is important here is that these barriers are removed so that all community members can participate.

5.3.2.2 political.

Self-determination is a right “from which all other rights flow. In relation to access to justice, self-determination affirms their right to maintain and strengthen indigenous legal institutions, and to apply their own customs and laws” (United Nations, 2013, p. 6). OCAP™ is the exemplar as to how self-determination can be implemented into research practices (TFNIGC, 2014). In 2007, the United Nations officially adopted the United Nations Declaration on the Rights of Indigenous Peoples (United Nations, 2008). This document is an important part of learning about self-determination, respect, dignity, justice, protection of human rights and obligations. Research practices need to comply with this declaration and uphold human rights. This area of consideration includes acknowledging the priority areas of the community leaders. Permission must be sought from community leadership. In this research, permission to carry out the research was received verbally from a counselor who represented the health portfolio and the community Chief and Council. This research was carried out over two separate political terms and it was important to stay informed and to connect with new council members in the area of health. I was advised of the process they wanted, who I was to work with, what support was available, and the protocols for reporting.

Under this consideration one also needs to examine and reflect on the balance of power in the research. Ideally, it will be the group or community that retains power in all interactions. This can be difficult to balance as we, as researchers and mostly academics, are used to holding the power in interactions with others. It is also possible that the group does not want to control and

would rather allow the researcher to take the lead – this is when reflexivity must be closely attended to in order to maintain an ethical relationship.

Questions one might ask as political considerations might be who can and cannot provide permission? Who holds power? What kind of power is it? How does the researchers position create power imbalances and what has been done to lessen the imbalance? How does the respect self-determination? There are also criteria that must be met to satisfy institutional or funding requirements so we need to remain cognizant how these requirements can shift power or undermine the right to self-determination.

5.3.2.3. ethical.

Ethical considerations are intertwined with all of the other considerations. They also include understanding the researchers' obligations under OCAPTM and the TCPS2, and to the group or community they are working with. Reciprocity, reflexivity, and respect are important parts of ethical considerations. Researchers need to ask themselves who benefits from the research? How does the research build capacity in the community? How will the research represent the community?

5.3.2.4. colonial.

Considerations in this area are about examining history and policies that have impacted the group with whom you are working. When one considers past research that propagated colonial beliefs instead of empowering Indigenous peoples this becomes increasingly important. Paternalistic, colonial practices have no place in research.

Reconciliation would fit under this consideration leading to question 'How does the research contribute to reconciliation?' Does it take on one of the calls to action? Has the researcher made them self-knowledgeable on the calls to action and historical context in which

the research is taking place? Does your research include the impact of our colonial history?

Justice is a concept that fits under colonial considerations. Because research has traditionally served to further oppress Indigenous peoples by researching ‘on’ or ‘to’ them, one must consider how the research will impact the people involved. Justice is about respecting people’s rights, ensuring resources are fairly distributed, and “promoting the common good” (Canadian Nurses Association, 2017, p. 24). Justice is also about bringing out “truths” but mandates reflection on how does the research give voice to those who may not have voice? Does your research respect voice? Does your research honour the truths and provide authentic representation?

5.3.2.5. *cultural.*

Cultural considerations are best reflected upon by learning from the group or community that you are working with. There are many ways to do research, but choosing an appropriate method or process requires consultation, reflection, and listening. For those of us who are privileged enough to work with and learn from Indigenous peoples, we can attest to the complexity and continual learning that must take place in order to be respectful within research. The role of an Elder, knowledge keeper, or other knowledgeable navigator is imperative. This is not only for non-Indigenous researchers, but all researchers, as there are many differences in protocols and expectations between and within groups which have a cultural imperative attached.

Researchers must consider the type of knowledge we are exploring. We need to ask questions, such as does the research involve traditional knowledge? Who can hold that knowledge? CIHR et al. (2014) identified that

the knowledge held by First Nations, Inuit and Métis peoples, the Aboriginal peoples of Canada. Traditional knowledge is specific to place, usually transmitted orally, and rooted in the experience of multiple generations. It is determined by an Aboriginal community’s land, environment, region, culture and language. Traditional knowledge is usually

described by Aboriginal peoples as holistic, involving body, mind, feelings and spirit. Knowledge may be expressed in symbols, arts, ceremonial and everyday practices, narratives and, especially, in relationships. The word tradition is not necessarily synonymous with old. Traditional knowledge is held collectively by all members of a community, although some members may have particular responsibility for its transmission. It includes preserved knowledge created by, and received from, past generations and innovations and new knowledge transmitted to subsequent generations. In international or scholarly discourse, the terms traditional knowledge and Indigenous knowledge are sometimes used interchangeably (p. 112).

Language is included under cultural considerations. How does the research reflect a consideration of language? Are there concepts that do not translate into English? Is the research best done in the traditional language? How will research be disseminated – does it need translation either to traditional languages or to English? How will that impact the findings and how they are heard or understood? Are there protocols to follow with the community? What is considered collective knowledge? Are there male and female roles impacting and impacted by language – how might this be included or reflected in the research?

Culture dictates how knowledge is created, how knowledge is shared, and how knowledge is preserved. This may or may not mean that knowledge is only held in memory or only shared orally or visually. It may also mean that knowledge is preserved written or recorded in Western ways. The options and decisions are always with the community.

5.3.3 Reflexivity

This concept is intertwined throughout the framework. According to Berger (2015), “reflexivity is commonly viewed as the process of a continual internal dialogue and critical self-evaluation of researcher’s positionality as well as active acknowledgement and explicit recognition that this position may affect the research process and outcome” (p. 220). While Enosh and Ben-Ari (2016) state “reflexivity refers to deliberate awareness involving both a contemplative stance (state of mind) and intentional activity aimed at recognizing differentness

and generating knowledge” (p. 1). Researchers must contemplate their actions, reactions, and processes to ensure we honour research values that prevail within the community.

To honour the research relationship reflexivity must occur from inception. We must continuously ask questions of ourselves. Why? What does this mean? What are the impacts of this decision? What are alternatives? Does this make sense? Is this important? Who is important for? It involves questioning both our assumptions and emotions, as well as consciously reflexivity (Gabriel, 2015). A consciously reflexive researcher acknowledges that they are not value-neutral, that their “research expresses, reinforces or undermines the values” they hold, and that the research cannot be separated from oneself (Gabriel, p. 334).

Reflexivity cannot replace is the researcher’s intelligence and craft first in generating the empirical material and then in probing and questioning it, seeking similarities and exceptions, continuities and discontinuities, plans and improvisations. Above all, what reflexivity cannot replace is the active and inquiring imagination that persistently asks three related questions “Why?” “What if?” and “So what?” (Gabriel, p. 334).

5.3.4 Reconciliation

In the wise practices framework, *reconciliation* is what we are moving towards. Reconciliation “is about establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country. For that to happen, there has to be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour” (Truth and Reconciliation Commission of Canada, 2015a, p. 3). Researchers must familiarize themselves with the documents from the TRC (readily available online), so they can better understand the past wrongdoings, acknowledge them, and contribute to a future that includes reconciliation.

We must engage in research that contributes to ‘new relationships.’ This may include research that examines the impacts of colonial history on the health of Indigenous peoples, that

explores disparities, that proposes solutions for disparities, or that shares lived experiences. Dissemination is also an important part of creating ‘new relationships.’ Without sharing, the research become meaningless and disrespects those who shared. ‘New relationships’ in this sense means that existing relationships move forward with a new or renewed commitment to reconciliation, and that those that are developed also focus on establishing and maintaining respectful relationships.

5.4 Opportunities for Wellness

The fourth objective of this research was to discover what these First Nations youth believe to be important events in their lives that have contributed to their well-being and who they are today. Based on the sharing circle, medicine wheel analysis, and personal interviews the youth shared what important events happened in their lives that contributed to their well-being and who they are today. Five intertwined themes were identified and included Culture and Spirituality as Wellness, Physical Activity as Wellness, Success as Wellness, Relationships as Wellness, and Relationships as ‘Dys’ Wellness. The discussion that follows will add some additional information to consider in taking advantage of the opportunities for wellness that the youth spoke about.

The youth in this research spoke of the importance of cultural activities and spirituality in their wellness. They found that cultural and spiritual activities contributed to their spiritual health. These activities were about being connected with their culture, family and community (receiving their spirit name, being born, participating in the Sundance, participating in school and with family). Youths recommended that health promotion activities include spiritual activities such as sweats, feasts, and ceremonies. These types of activities were also included on the youth’s winter count as important events that contributed to their wellness.

The youth overwhelmingly associated the physical aspect of the medicine wheel with health and team sports. These team sports included lacrosse, basketball, hockey, and volleyball. There was also one youth who also chose to include sport as part of their mental health. There is an abundance of literature that supports these beliefs about the importance of sport and physical activity as part of holistic health. The youth also recommended that sports be used as a health promotion activity that keeps you in shape, keeps you feeling fit, gives you something to focus on, keeps you doing well in school, and helps you feel connected to others. One youth suggested that sports help youth keep away from drugs and alcohol.

Youth identified success in sports and in academics as important events that contributed to wellness. They spoke about the pride they felt in themselves and their achievements. Success in sports could be linked with the sense of belonging, friends, recognition and acknowledgement when they are successful as individuals and as part of a team.

Youth spoke of both positive and negative experiences related to relationships. Positive relationships included those with friends and family. They included stories about family supporting them, being part of a family and their role within the family, as well as visiting with family. Friendships were considered an important event in the lives of these youths. Many of them included making friends, long term friends, sports with their friends on their winter count. One youth even suggested that a health promotion activity be helping youth make friends through organized activities.

5.5 Opportunities for Practice

At the beginning of this dissertation I posed the question - what is the role for nursing that can contribute to reversing these health inequities? This role is as multifaceted as the causes

of the inequities. This research explored the role for nursing in research and what youth believe about wellness with several key lessons emerging from that process.

The first lesson was about how we, as researchers, practice in research. Through developing a greater understanding of research; the processes, the methods, the approaches, the principles, and the considerations, I came to understand the need for an adaptable approach. Wise practices represent an opportunity for nursing research to engage in research that is inclusive and respects Indigenous ways of knowing and understanding.

The second lesson is that youth have clear ideas about what is required for wellness. They advised that nurses needed to include activities that supported relationships (friends, family, teams), encouraged physical activity (play, sports, outdoor activities), supported culture and spirituality (learning, participating, practicing), and inspired them be successful.

The significance of cultural, spirituality, and relationships in the wellness of First Nations youth can be further understood by examining the literature on cultural continuity and cultural connectedness as foundations for health promotion practices. According to Burack et al. (in press), culture is an important factor in the development of resilience, feelings of well-being, and success for Indigenous youth. Cultural continuity, which includes having an understanding of ‘self’ with a connection to the past and present, as well as over time, is also a protective factor against suicide (Burack et al.). Other studies have found that a link with both traditional and mainstream identity can lead to increased personal adjustment and negative effects such as “stress, identity confusion, and isolation.” Several studies (Flanagan et al., 2011; Pu et al., 2013; Tyser et al., 2014) found decreased levels of perceived aggression amongst peers and were less likely to engage in violence, less depressive symptoms, and decreased alcohol use.

Cultural connectedness has been defined as “the extent to which a First Nations youth is integrated within his or her First Nation culture” (Snowshoe et al., 2015, p. 249). This construct has been measured by the Cultural Connectedness Scale that examines *identity* items such as involvement in exploring culture, history, traditions, and customs, feelings of connection to community, nation or ancestors; *tradition* items such as language, ceremony, and cultural practices; *spirituality* items such as having a spirit or cultural name, using culture to guide decisions, and spiritual beliefs (Snowshoe et al., 2015). Cultural connectedness has been found to be positively correlated with indicators of mental wellness for First Nations youth (Snowshoe, Crooks, Tremblay, & Hinson, 2017).

Culture is not a lone contributor to wellness. The importance of combining culture and sport was emphasized by Dubnewick, Hopper, Spence, and McHugh (2018) who found that participation in traditional games contribute to cultural pride, a sense of cultural continuity, connections to Elders, increased cultural and ancestral knowledge, increased confidence, and a sense of belonging. Sport also provided opportunities for networking and leadership. The use of traditional games has also been proposed as a way towards reconciliation. Support for traditional games is reinforced in the Truth & Reconciliation Calls to Action, which calls for “community sport programs that reflect the diverse cultures and traditional sporting activities” (TRC, 2015b, p. 10).

Sports as community was the concept of interest in a study by McHugh, Coppola, Holt and Andersen (2015). They found that community was defined as a place of belonging, a place that is respectful and supportive, a place that consists of family and friends, a place to connect, and a place you are in now while recognizing your roots. Team sports have been positively associated with mental health, self-esteem, life satisfaction, social acceptance, body acceptance,

emotional self-efficacy, as well as reduced risk-taking behaviors, feelings of hopelessness and suicidality (Eime, Young, Harvey, Charity, & Payne, 2013). For female team participants, achievements in early adolescence had positive effects on self-esteem in middle adolescence (Eime et al.). Longitudinal studies found that team participation also had longer term impacts such as “lower social anxiety, lower social isolation, better social self-concept, and improved self-esteem” (Eime et al., p. 18).

Sports have been positively associated with wellness. They have been proposed as an intervention that contributes to holistic health (McHugh, Holt, & Andersen, 2015). A systematic review by Bruner et al. (2016) identified both positive and negative links between sport and youth development. Opportunities for positive youth development through sport included empowerment, increased well-being, learning about culture and tradition, and increased engagement in school (Bruner et al.).

Not only did sports have a positive effect on physical and mental health, it also impacts relationships. Group activities such as sports encourage sense of community, a sense of belonging, and a sense of a common goal, and support social connectivity (Kerpan & Humbert, 2015). Sports has been proposed as a means for positive youth development given the right circumstances. These circumstances include effective coaching, positive parental involvement, and positive peer relationships (Holt & Neely, 2011).

Crooks et al. (2017) explored the effects of a culturally-relevant mentoring program. This program, “the Fourth R is an evidence-based, healthy relationships and violence prevention program that was designed for universal implementation in classroom” (Crooks et al., p. 89). They included First Nations, Métis, and Inuit students in grades 7 – 12, in sessions that included the healthy development of spiritual, mental, physical, and emotional self (for Gr. 7/8), and peer

mentors that supported the development of healthy, positive relationships (Gr. 9 – 12). The participants felt that the program supported them in developing healthy relationships and showed higher levels of mental health and cultural identity.

Negative effects on relationships were also present in the stories of the youth. They identified a number of ways that they were impacted by moving such as being homesick, missing family, changing schools, losing friends and having to make new relationships. According to Snyder and Wilson (2015), “Aboriginal mobility experiences are intergenerational in nature, and deeply influenced by colonial practices – such as the residential school legacy, and resulting child welfare injustices – that impact holistic health at the individual, family, and community level” (p. 187). Programming that is based on cultural connectedness may mitigate the negative impacts of residential mobility and migration.

A number of terms have been used to describe moving such as *migration* (moving between rural or reserve and urban places), and *residential mobility* (moving within a city) (Snyder & Wilson, 2015). In Winnipeg, Manitoba, residential mobility rates were twice as high for Indigenous peoples as opposed to non-Indigenous people and First Nations participants in their study had all experienced at least two moves in the past year (Snyder & Wilson). In Canada, Indigenous peoples have higher rates of geographic mobility between rural and urban areas than non-Indigenous counterparts (Snyder & Wilson).

Reasons for migration included family-related causes, opportunities for education and employment, and housing (Snyder & Wilson). Reasons for residential mobility included substandard housing, safety concerns, childhood relocation, and landlord issues (Snyder & Wilson). Some participants in this study (Snyder & Wilson) have had a lifetime of residential mobility. One participant stated:

When I was younger...I used to live in foster homes... Well my parents, they were either going back and forth [between remote Northern reserve and the city]. I'm so used to moving all my life... I'm just used to moving all the time...I'm immune to it. Y'know, that's it. (p. 185)

In relation to residential mobility, participants also expressed difficulty with new schools and making friends and changes, stress related health issues related to moving (Snyder & Wilson). Migration, as opposed to residential mobility, was found to have some positive aspects such as finding a supportive education that included spiritual connections (Snyder & Wilson). Negative aspects of migration were related to being disconnected from one's traditional activities (Snyder & Wilson).

Anderson and Leventhal (2016) found that high levels of residential mobility (moving more than four times) with during childhood and adolescence was associated internalizing their problems. There were several hypothesized additional variables for this: disadvantaged population, less social support, fewer friends, additional stressors were present, family stability, poverty, cumulative disadvantages (Anderson & Leventhal). It is important to note that they found no associations between high mobility and adolescents' achievement in school.

5.5 Limitations

There are several limitations of this research and opportunities for further exploration. This research took place in one community that has high levels of involvement with sports. The importance of physical activity, and in particular team sports, was very prevalent in the themes Physical Activity as Wellness as well as Success as Wellness. These themes represent a large percentage of the lessons, so it is possible that other contexts may not have this high level of involvement. The participants may not be representative of a larger population of on-reserve First Nations youth. For this reason, wellness needs to be further explored in other contexts to examine the importance of physical activity and team sports in wellness.

Following the Medicine Wheel sharing the discussions with the youth, Elder Wayne Goodwill focused on the youths individual winter count. We did not get an opportunity to discuss the Medicine wheel as a large group. This would have added another layer to the youth's understandings of wellness. The sharing circle was another opportunity to examine the social context of wellness with the youth because of the lack of discussion and distracting behavior of some. The use of smaller group settings might be more amenable to deeper, more meaningful discussions.

This research proposed a wise practice framework for research with Indigenous communities. This framework was developed based on my experiences with this project, reflections, and literature review. This framework has not been evaluated through research. This framework has been proposed as a tool to be used by researchers and to guide them in research that is adaptable, flexible, creative, reflexive, pragmatic, respectful, and culturally and locally relevant.

The community of Standing Buffalo Dakota First Nation is a Dakota community and has a history of utilizing winter counts as a traditional way to preserve and share knowledge. Further examination of wise practices and their applicability to other contexts is warranted, whether this be through the use of a culturally relevant traditional method way of sharing or as a newly introduced innovative visual method for research. I have proposed several instances that it may be used in, but I believe there are many more. It proved useful as a method, as data, and as a dissemination tool. Research that explores its utility in other contexts is warranted.

This research was about discovering what these First Nations youth believe are important events in their lives that have contributed to their well-being and who they are today. One unexpected event that was repeated on many winter counts was residential mobility and

migration. During the interviews, not all of the youth explained, or perhaps even understood the reasons why they moved. The literature supported what the youths understood as important events influencing their wellness. It showed high levels of residential mobility and migration as well as impacts on the health of those involved. I believe we need to have better understandings of the long-term impacts of residential mobility and migration on First Nations youth. This includes understandings of the reasons as well as the needs are of those who have high levels of residential mobility and migration.

5.6 Conclusion

This research began with a vision to reintroduce winter counts back into the community of Standing Buffalo Dakota First Nation, progressed to an exploration of winter counts as an Indigenous methodology to explore youths' perspective of wellness, and now to lessons that can be shared with this community as well as the broader global research communities.

The exploration of winter counts as a visual method of research led me to look deeper into what the literature offered researchers working with First Nations communities and find that there are a myriad of approaches, principles, and methods. What I aimed to do was to create a framework to assist researchers in thoughtfully engaging in research with Indigenous communities. It is not a 'how to', but offers wise practices that are adaptable, flexible, creative, reflexive, pragmatic, respectful, as well as culturally and locally relevant.

The research process included visioning, learning, creating, sharing and revisioning. This went beyond the traditional cycle of Look-Think-Act and incorporated important aspects such as relationships, lessons, co-creation, flexibility, and creativity. Utilizing winter counts in the research process encouraged creativity, self-reflection, and self-expression. It was the method, the data, and the dissemination tool. This research has shown the winter count as flexible and

culturally respectful, with an unlimited potential in research, therapy, and education.

Winter counts were introduced to the youths as a way to preserve and share knowledge about events that contributed to their well-being. The winter count was found to be a flexible, useful, and culturally respectful ways to share their experiences, as well as a tool for dissemination. The youth identified events that contributed to their well-being and five themes emerged from their stories. These included Culture and Spirituality as Wellness, Physical Activity as Wellness, Success as Wellness, Relationships as Wellness, and Relationships as 'Dys' Wellness. Each of these themes offers some opportunities for wellness, as well as some further areas for research.

These opportunities for wellness and research are also opportunities for nursing to contribute to reversing the health inequities. Opportunities for nursing to engage in research that is inclusive of those who have been excluded through the use of wise practices, to bring the voices of those who are directly impacted by inequities to the forefront through the use of methods that respect ways of knowing and sharing knowledge, and to

bring together our different ways of knowing to motivate people, Aboriginal and non-Aboriginal alike, to use all our understandings so that we can leave the world a better place and not compromise the opportunities for our youth through our own inaction (Bartlett, Marshall, Marshall, & Iwana, 2012, p. 11).

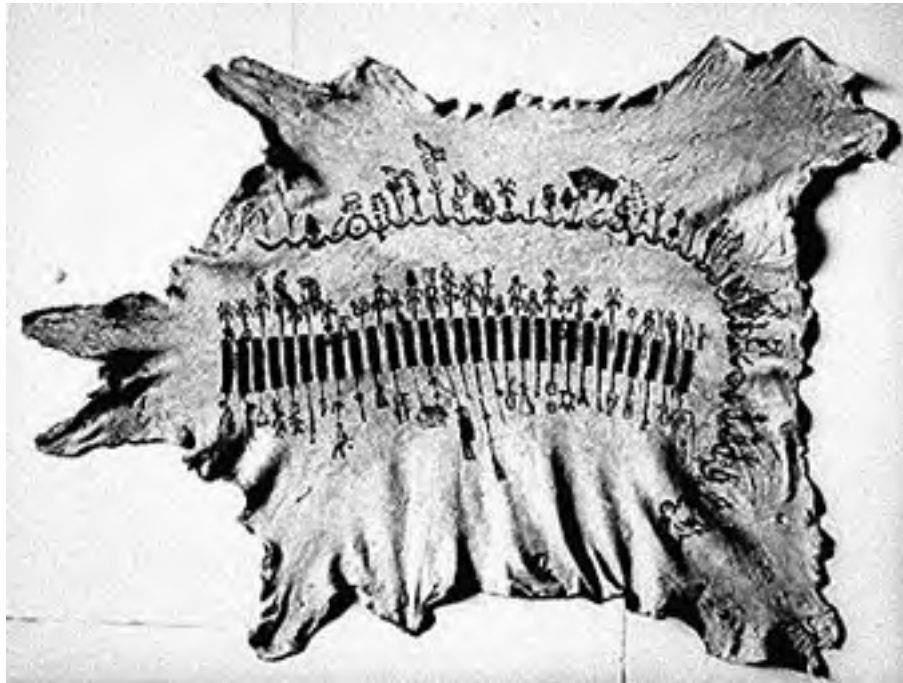
Appendix A

Lone Dog's Winter Count



Photograph 1. Copy of Lone dog's winter count. (Smithsonian, 2005)

Appendix B
Kiowa Winter Count



Photograph 2. Kiowa winter count showing how lines were used to connect to black bars in the middle to designate those pictographs as being winter events (Smithsonian, 2011).

Appendix C

Examples of the Layouts of Various Winter Counts



Photograph 3. Flame winter count (Smithsonian, 2005)



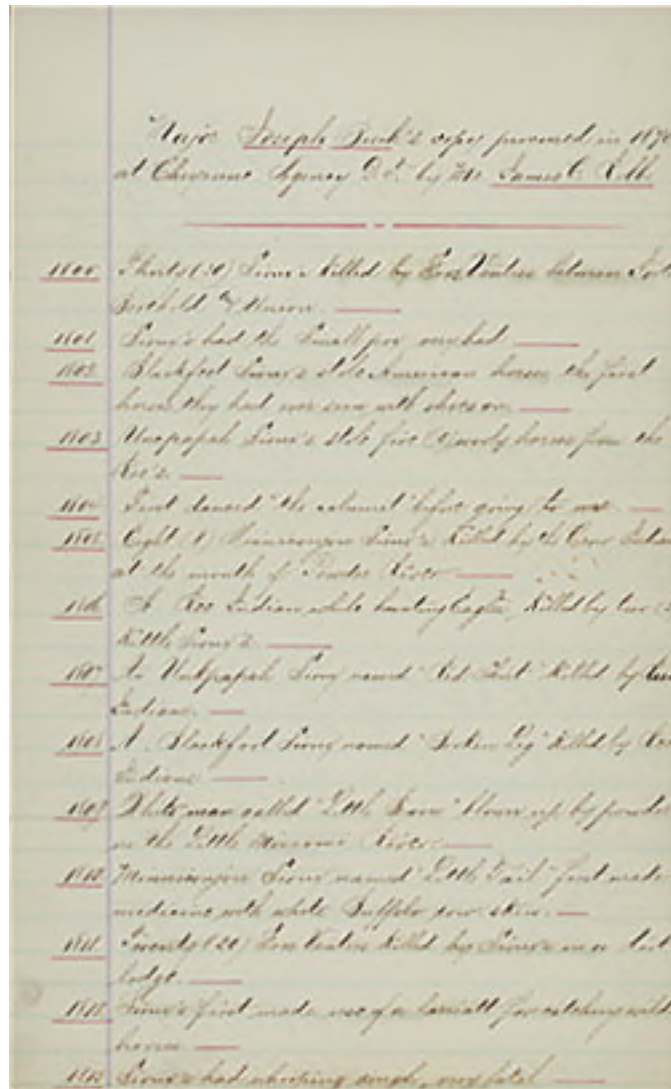
Photograph 4. Rosebud winter count (Smithsonian, 2005)



Photograph 5. Long soldier winter count (Smithsonian, 2005)

Appendix D

Text Only Winter Count



Photograph 6. Major Bush winter count. An example of a winter count that used only text and named the years (Smithsonian, 2005)

Appendix E
Black Robes and Christianity



Photograph 7. Winter count by Scott that used painting to represent periods of time in history
(Scott, 2002).

Appendix F

Residential Schools, Drunks and Jails



Photograph 8. Winter count by Scott that used painting to represent periods of time in history (Scott, 2002).

Appendix G

Participant Consent Forms and Information Package

Parent/Guardian Letter

Your son or daughter has been invited to participate in a research project.

- Participation is optional and is not related to their schoolwork. They can withdraw at any time for any reason and it will not affect their participation in future activities or harm their relationship with the research team.
- It will involve being interviewed about the winter counts they created as part of their participation in the Where Do I Get Porcupine Quills? An Exploration of Winter Counts as First Nations Ways of Knowing for Youth project and taking part in a sharing circle. It is estimated that these two activities will take up 15 to 20 hours in total over a period of four months. We will meet at the school about once every 2 weeks.
- All information from interviews and the sharing circle will be kept confidential, and their identity will be protected.
- Any questions or concerns can be addressed with Ms. Deanna Bickford by phone (306) 693-6592, or email d.bickford@usask.ca or Dr. Pammla Petrucka at (306) 535-9597 or email pammla.petrucka@usask.ca.

PARTICIPANT CONSENT FORM

Project Title: Where Do I Get Porcupine Quills? An Exploration of Winter Counts as First Nations Ways of Knowing for Youth

Researcher: Deanna Bickford, RN, PhD (c), College of Nursing, University of Saskatchewan, d.bickford@usask.ca

Supervisor: Dr. Pammla Petrucka, RN, College of Nursing, University of Saskatchewan, pammla.petrucka@usask.ca

Community Researcher: Cheryl Tawiyaka, Brighter Futures Coordinator, Standing Buffalo Dakota First Nation

Purpose and Objective of the Research:

The main purpose of this research is to develop an understanding of the use of traditional Dakota winter counts (see attachment for further information about winter counts) as a way for youth to share their ideas and beliefs about health with others. I also want to learn whether the use of winter counts for sharing their ideas and beliefs was respectful of any cultural beliefs they may have.

Other objectives of this research are to

- teach the youth about winter counts as a traditional way to share knowledge about the community, important or unusual events, and cultural beliefs
- share what we learn about health and the beliefs of what makes the youth health or unhealthy with the community, other researchers, and health care professionals

Procedures: (See consent guidelines section 4)

- I will be inviting all those in grade 9 at Tatanka Najin School who are able to commit to meeting every 2 weeks for a 4 month period
- This study will involve learning about winter counts, creating a personal winter count, talking about your winter count individually and as part of a group. It may also involve displaying your winter count for your community, for other researchers, or other events.
- We will arrange meetings to take place after regular school hours
- I anticipate this research will involve meeting for 1 – 2 hours every 2 weeks for about 4 months. The meetings will take place in the community and you will be provided with transportation if needed.
- Personal interviews will take 1- 2 hours and take place in the community at the school or the hall. These interviews will be video or audio recorded.
- I anticipate there will be 2 or 3 sharing circles of about 1- 2 hours in length
- There is also the possibility you may be asked to attend other events such as community events or conferences to display your winter count and teach others about winter counts,

health, or research

- The winter count will remain your property after completion of this study. I will make a copy of your winter count and take photographs of it that may be shared in publications or presentations
- Please feel free to ask any questions regarding the procedures and goals of the study or your role.

Funded by: *CIHR Doctoral Research Award*

Potential Risks:

- If you choose to participate in this study, it is possible that you may feel uncomfortable with sharing your views about health.
- If you have any issues or concerns, arrangements can be made to discuss with an appropriate person.
- It is possible that others will know you are part of this research

Potential Benefits:

- If you choose to participate in this study, there may or may not be direct benefits to you. It is hoped the information gained from this study can be used in the future to benefit other people. Benefits of participation may include: contributing to a better understanding of health from your perspective, and a sense of pride in your contribution.
- You may qualify for a special project high school credit for participating in this research. A letter of participation will be provided to you on request.

Confidentiality:

- Your confidentiality will be respected. No information that tells anyone who you are will be given without your permission.
- Your information will be stored safely and locked up so that no one other than the members of the research team will see it.
- Because you will be part of a group session (a sharing circle), it is not possible to promise you that all information will be confidential to the researcher only. However, each person at the sharing circle will be asked to read and sign the **CONFIDENTIALITY PLEDGE**, which is attached.
- The results of this study may be presented in scientific meetings or published in journals, but your personal identity will not be shared. Information will be shared that is about the group of participants, so every effort will be taken to be sure that the information does not identify you
- All of the information collected in this study including any paper, computerized, or digital recordings will be stored in the researcher's locked cabinet.
- Electronic media will be kept on password protected and encrypted hard drives
- Consent forms and anything with your name on it will be kept separate from the data.
- After the study this information will be kept for five years and then will be destroyed.

Right to Withdraw:

- Your participation is voluntary and you can answer only those questions that you are comfortable with.
- You may withdraw from the research project for any reason, at any time without

explanation or penalty of any sort.

- Should you wish to withdraw, you do not need to give an explanation. Please notify Deanna Bickford and every effort will be made to remove your data
- Your right to withdraw data from the study will apply until the data has been pooled. After this date, it is possible that some form of research dissemination will have already occurred and it may not be possible to withdraw your data from.

Follow up:

- To obtain results from the study, please contact Deanna Bickford
- A participants event will be held at the end of the research to discuss findings with you

Questions or Concerns

- Contact the researcher using the information at the top of page 1
- This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board. Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office ethics.office@usask.ca (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent

1. SIGNED CONSENT

Your signature below indicates that you have read and understand the description provided; I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

_____	_____	_____
<i>Name of Participant</i>	<i>Signature</i>	<i>Date</i>
_____	_____	
<i>Researcher's Signature</i>	<i>Date</i>	

A copy of this consent will be left with you, and a copy will be taken by the researcher.

2. VISUAL DATA

Visually Recorded Images/Data: Participant or parent/guardian to provide initials:

- Photos may be taken of me [my child]for: Analysis _____ Dissemination*

- Videos may be taken of me [my child] for: Analysis _____ Dissemination*

*Dissemination involves sharing what we have learned from this research. This may include presentations in the community, at conferences, or as part of teaching, as well as in publications. Even if no names are used, you [or your child] may be recognizable if visual images are shown as part of the results.

3. ORAL CONSENT

Oral Consent: If on the other hand the consent has been obtained orally, this should be recorded. For example, the Consent Form dated, and signed by the researcher(s) indicating that “I read and explained this Consent Form to the participant before receiving the participant’s consent, and the participant had knowledge of its contents and appeared to understand it.” In addition, consent may be audio or videotaped.

_____ <i>Name of Participant</i>	_____ <i>Researcher’s Signature</i>	_____ <i>Date</i>
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Confidentiality Pledge

In order to respect the privacy of others, I promise not to discuss anything that comes from the sharing circles or discussion that I am take part in as part of my participation in “Where Do I Get Porcupine Quills? An Exploration of Winter Counts as First Nations Ways of Knowing for Youth.” I will also not identify any of the other participants in this research outside this project.

Printed name of participant _____

Signature _____ Date _____

Appendix H

Interview Guide

Introduction and Briefing

Name _____

- Interviewer: If it is agreeable to you I will use a sound and video recorder during the interview so I can give my full attention to what you are telling me. I will focus the video on your winter count.
- I would like to ask you some questions about your experience and thoughts about creating your winter count and about what you chose to draw on your winter count. I will be asking questions about today is how you felt about Winter counts as a way of sharing your knowledge about health and whether or not you felt it was a way that respected your culture. It is my hope that this information will help to better understand methods or ways of researching with First Nations peoples.
- Do you have any questions before we start?

Interview Questions

1. Can you tell me about the purpose of the winter counts?
2. Has the purpose changed over the years?
3. Please tell me about the process of creating your winter count?
4. Based on what I have learned about winter counts I understand that they were used to share important information and events. I would like to you to tell me how you used it to share important information or events?
5. Please me about your experience of using a winter count as a way to display your ideas and thoughts about health?

6. How do winter counts respect First Nations ways of sharing knowledge?
7. How do you see the future use of winter counts to enhance knowledge sharing about health?
8. How do you see the future use of winter counts as a means to enhance the health of First Nations peoples?
9. How can nurses use winter counts to enhance First Nations peoples' well-being?
10. Can you tell me how winter counts would be useful to inform health programs?
11. Please tell me about the pictographs you have drawn?
12. Please show me if there are pictographs that are more important? Or less important?

Final Questions and Debriefing

1. Do you have anything else you would like to add or feel that I may have missed in this interview?
2. Are there any questions you have for me?

Interviewer: thank you for your time.

References

- Altheide, D. L., & Johnson, J. M. (2011). Reflections on interpretive adequacy in qualitative research. In Denzin, N.K. & Lincoln, Y.S. (Eds.), *The SAGE handbook of Qualitative Research* (4th ed., pp. 581 - 594). Los Angeles, London, New Delhi, Singapore, & Washington, DC: Sage.
- Absolon, K., & Willett, C. (2004). Aboriginal research: Berry picking and hunting in the 21st century [Electronic version]. *First Peoples Child & Family Review*, 1(1), 5-17.
- Anderson, S., & Leventhal, T. (2016). Residential mobility and adolescent achievement and behavior: Understanding timing and extent of mobility. *Journal of Research on Adolescence*, 27(2). 328 – 343. DOI 10.1111/jora.12288
- Baiardi, J. M., Brush, B. L., & Lapides, S. (2010). Common issues, different approaches: Strategies for community-academic partnership development. *Nursing Inquiry*, 17(4), 289 – 296.
- Baillie, C. P. T., Johnson, A., M., Drane, S., LePage, R., Whitecrow, D., & Lévesque, L. (2016). For the community, by the community: Working with youth to understand the physical activity-environment relationship in First Nations communities. *Youth Engagement in Health Promotion*, 1(2). (This journal is online only)
- Barnhardt, R. (2007). Creating a place for Indigenous knowledge in education: The Alaska Native knowledge network. In G. Smith & D. Gruenewald (Eds.), *Place-Based Education in the Global Age: Local Diversity*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Bartlett, C., Marshall, M., & Marshall, A. (2012). Two-eyed seeing and other lessons learned within a co-learning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. *Journal of Environmental Studies and Sciences*, 2(4), 331 – 340. DOI: 10.1007/s13412012-0086-8

- Bartlett, C., Marshall, M., Marshall, A., & Iwama, M. (in press). Integrative science and two-eyed seeing: Enriching the discussion framework for healthy communities. In L. K. Hallstrom, N. Guehlstorf, & M. Parkes (Eds.), *Beyond intractability: Convergence and Opportunity at the Interface Environmental, Health and Social Issues*. Vancouver, BC: UBC Press.
- Barwin, L., Shawande, M., Crighton, E., & Veronis, L. (2015). Methods-in-place: “Art Voice” as a locally and culturally relevant method to study traditional medicine programs in Manitoulin Island, Ontario, Canada. *International Journal of Qualitative Methods*, 14(5), 1 - 11. DOI: 10.1177/1609406915611527
- Battiste, M. (2000). Maintaining Aboriginal identity, language, and culture. In M. Battiste (Ed.), *Reclaiming Indigenous Voice and Vision* (pp. 192 – 209). Vancouver, BC: UBC Press.
- BC Centre for Disease Control. (2009). *A guide to wise practices for HIV/AIDS education and prevention programs*. Retrieved from <http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/STI/Chee%20Mamuk/CheeMamukWisePracticesGuide.pdf>
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219 – 234. DOI: 10.1177/1468794112468475
- Bickford, D. (2011). *A secondary analysis: Paths to living well for on-reserve youth*. (Master's thesis). Retrieved from <https://ecommons.usask.ca/handle/10388/ETD-2011-10-189>
- Blumenthal, D. S. (2011). Is community-based participatory research possible? *American Journal of Preventive Medicine*, 40(3), 386 - 389. doi:10.1016/j.amepre.2010.11.011
- Bomar, P. J. (2010). Community-based participatory nursing research: A culturally focused case study. *Japan Journal of Nursing Science*, 7(1), 1–8. doi:10.1111/j.1742-

Bouchard, D. & Martin, J. (2009). *The seven sacred teachings of White Buffalo Calf Woman*.

Retrieved from

http://www.btgwinnipeg.ca/uploads/5/2/4/1/52412159/the_seven_sacred_teachings_.pdf

Bruner, M. W., Hillier, S., Baillie, C.P.T., Lavallee, L.F., Bruner, B., Hare, K., ... Lévesque, L.

(2016). Positive youth development in Aboriginal physical activity and sport: A systematic review. *Adolescent Research Review*, 1(3), 257 – 269. DOI 10.1007/s40894-015-0021-9

Burack, J. A., Gurr, E., Stubbart, E., & Weva, V. (in press). Personality development among

Indigenous youth in Canada: Weaving together universal and community-specific

perspectives. *New Ideas in Psychology*. <https://doi.org/10.1016/j.newideapsych.2018.04.002>

Burke, C. E. (2007a). Waniyetu wówapi: An introduction to the Lakota winter count tradition.

In. Greene, C., & Thornton, R. (Eds.), *The year the stars fell*. (pp. 1 – 11), Lincoln:

University of Nebraska Press.

Burke, C. E. (2007b). Winter counts in the Smithsonian. In. Greene, C., & Thornton, R. (Eds.),

The year the stars fell. (pp. 13 - 69), Lincoln: University of Nebraska Press.

Canadian Institutes of Health Research. (2017). *Defining Indigenous health research*. Retrieved

from <http://www.cihr-irsc.gc.ca/e/50340.html>

Canadian Institutes of Health Research Natural Sciences and Engineering Research Council of

Canada Social Sciences and Humanities Research Council of Canada. (2014). *Tri-*

Council policy statement: Ethical conduct for research involving humans. Ottawa, ON:

Author.

Canadian Nurses Association. (2008). *Code of ethics for registered nurses*. Ottawa, ON: Author

Canadian Nurses Association. (2017). *Code of ethics for registered nurses*. Ottawa: Author.

- Chamberlain, V. D. (1984). Astronomical content of the North American Plains Indian calendars. *Archaeoastronomy supplement*, 15(6), S1 – S54.
- Chilisa, B. (2012). *Indigenous research methodologies*. SAGE Publications: Thousand Oaks, California.
- Cochran, P. A., Marshall, C. A., Garcia-Downing, C., Kendall, E., Cook, D., McCubbin, L., & Gover, R. M. S. (2008). Indigenous ways of knowing: Implications for participatory research and community. *American Journal of Public Health*, 98(1), 22-27. doi: 10.2105/AJPH.2006.093641
- Cohen, L. K. (1942). Big Missouri's winter count—A Sioux Calendar 1796–1926. *Indians at Work*, 6 (6), 16 – 20.
- Creswell, J. W. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications: Thousand Oaks, California.
- Crooks, C. V., Exner-Cortens, D., Burm, S., Lapointe, A., & Chiodo, D. (2017). Two years of relationship-focused mentoring for First Nations, Métis, and Inuit adolescents: Promoting Positive mental health. *Journal of Primary Prevention*, 38(1-2), 87 - 104. DOI 10.1007/s10935-016-0457-0
- Cunsolo Willox, A., Harper, S. L., Edge, V. L., My Word, & Rigolet Inuit Community Government. (2013). Storytelling in a digital age: Digital storytelling as an emerging narrative method for preserving and promoting indigenous oral wisdom. *Qualitative Research*, 13(2), 127 – 147.
- Denzin, N.K., & Lincoln, Y. S. (2011). The discipline and practice of qualitative research. In Denzin, N. K. & Lincoln, Y. S. (Eds.), *The SAGE handbook of Qualitative Research* (4th ed., pp. 1 - 19). Los Angeles, London, New Delhi, Singapore, & Washington, DC: Sage.

- Dubnewick, M., Hopper, T., Spence, J. C., & McHugh, T. F. (2018). “There’s a cultural pride through our games”: Enhancing the sport experiences of Indigenous youth in Canada through participation in traditional games. *Journal of Sport and Social Issues*, 42(4), 207 - 226. <https://doi.org/10.1177%2F0193723518758456>
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10(98), 1 – 21. <http://www.ijbnpa.org/content/10/1/98>
- Enosh, G., & Ben-Ari, A. (2015). Reflexivity: The creation of liminal spaces—Researchers, participants, and research encounters. *Qualitative Health Research*, 26(4), 578 - 584. DOI: 10.1177/1049732315587878
- Ermine, W. (2007). The ethical space of engagement. *Indigenous Law Journal*, 6(1), 193–203.
- Falk-Raphael, A. (2005). Speaking truth to power? *Advances In Nursing Science*, 28(3), 212 – 223. doi:10.1038/embor.2010.35
- Feraca, S. E. (1994). *The wounded bear winter count: 1815-1816 1896-1897*. Kendell Park, NJ: Lakota Books.
- Finister, D. (1968). The Hardin winter count. *Museum News*, 29(3-4), 1 – 56.
- First Nations Centre. (2007). OCAP: Ownership, Control, Access and Possession. Sanctioned by the First Nations Information Governance Committee, Assembly of First Nations. Ottawa: National Aboriginal Health Organization.
- Flanagan, T., Iarocci, G., D'Arrisso, A., Mandour, T., Tootoosis, C., Robinson, S., et al. (2011). Reduced ratings of physical and relational aggression for youths with a strong cultural

- identity: Evidence from the Naskapi people. *Journal of Adolescent Health*, 49, 155–159.
<http://dx.doi.org/10.1016/j.jadohealth.2010.11.245>.
- Flicker, S. (2008). Who benefits from community-based participatory research? A case study of the Positive Youth Project. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*, 35(1), 70–86. doi:10.1177/1090198105285927
- Flicker, S., O'Campo, P., Monchalin, R., Thistle, J., Worthington, C., Masching, R., Guta, A., Pooyak, S., Whitebird, W., & Thomas, C. (2015). Research done in “A Good Way”: The importance of Indigenous Elder involvement in HIV community-based research. *American Journal of Public Health*, 105(6), 1149 - 1154
- Freire, P. (2009). Pedagogy of the oppressed: 30th anniversary edition. M. B. Ramos (Trans.). New York & London. Continuum.
- Gabriel, Y. (2015). Reflexivity and beyond – a plea for imagination in qualitative research methodology. *Qualitative Research in Organizations and Management: An International Journal*, 10(4), 332 – 336. DOI 10.1108/QROM-07-2015-1305
- Galler, R. W. (2008). Sustaining the Sioux confederation: Yanktonai initiatives and influence on the Northern Plains, 1680. *The Western Historical Quarterly*, 39(4), 467-490.
- Gaventa, J., & Cornwall, A. (2004). Power and knowledge. In W. K. Carroll (Ed.), *Critical Strategies for Social Research* (pp.320 – 337). Toronto, ON: Canadian Scholars Press.
- Geia, L. K., Hayes, B., & Usher, K. (2013). Yarning/Aboriginal storytelling: Towards an understanding of an Indigenous perspective and its implications for research practice. *Contemporary Nurse*, 46(1), 13 – 17.
- Getty, G A. (2010). The journey between Western and Indigenous research paradigms. *Journal of Transcultural Nursing*, 21(1), 5 – 14.

- Godhino, V., Russell, R., & Singh, S. (2015). Learning about the money-story through stories, art and silences. Applying Indigenous research methodologies. *Creative Approaches to Research*, 8(1), 132-145.
- Goulding, D., Steels, B., & McGarty, C. (2016) A cross-cultural research experience: Developing an appropriate methodology that respectfully incorporates both Indigenous and non-Indigenous knowledge systems, *Ethnic and Racial Studies*, 39(5), 783-801, DOI: 10.1080/01419870.2015.1081960
- Goulet, L., Linds, W., Episkeniw, J., Schmidt, K. (2011). Creating a space for decolonization: Health through theatre with Indigenous youth. *Native Studies Review*, 20(1), 89 – 116.
- Government of Canada. (2013). Standing Buffalo connectivity profile. Retrieved from <http://www.aadnc-aandc.gc.ca/eng/1357840942277/1360166667173?=&wbdisable=true>
- Grange, R. T. (1963). The Garnier Oglala winter count. *Plains Anthropologist*, 8(20), 74-79.
- Greene, C. S. (2005). Winter counts and coup counts: Plains pictorial art as native history. *Anthronote*, 26(2). 1 – 9.
- Guèvremont, A., Carrière, G., Bougie, E., & Kohen, D. (2017). Acute care hospitalization of Aboriginal children and youth. *Health Reports*, 28(7), 11 – 17. Statistics Canada, Catalogue no. 82-003-X.
- Hackett, F. J. P. (1991). *The 1819-20 measles epidemic: Its origin, diffusion and mortality effects upon the Indians of the Petit Nord*. University of Manitoba. Master of Arts.
- Hall, L., Dell, C., Fornssler, B., Hopkins, C., & Mushquash, C. (2015). Research as cultural renewal: Applying Two-Eyed Seeing in a research project about cultural interventions in First Nations addictions treatment. *International Indigenous Policy Journal*, 6(2), pages.

- Hart, M. (2007). Indigenous knowledge and research: The mikiwáhp as a symbol for reclaiming our knowledge and ways of knowing. *First Peoples Child & Family Review*, 3(1), 83–90.
- Henning, E. R. P. (1982). Western Dakota winter counts: An analysis of the effects of westward migration and culture change. *Plains Anthropologist*, 27(95), 57 – 65.
- Her Many Horses, E. (2007). Tasunka Ota Win Waniyetu wówapi. In Greene, C., & Thornton, R. (Eds.), *The year the stars fell*. (pp. 317 - 322), Lincoln: University of Nebraska Press.
- Hergenrather, K. C., Geishecker, S., McGuire-Kuletz, M., Gitlin, D. J., & Rhodes, S. D. (2010). An introduction to community-based participatory research. *Rehabilitation Education*, 24(3 & 4), 225 – 238.
- Hinch-Bourns, A. C. (2013). In their own words, in their own time, in their own ways: Indigenous women's experiences of loss, grief, and finding meaning through spirituality. (Master's thesis). Available at https://mspace.lib.umanitoba.ca/bitstream/handle/1993/22182/Hinch-Bourns_Andrea.pdf?sequence=3
- Hogue, M. M. (2016). Aboriginal ways of knowing and learning, 21st century learners, and STEM success. *In Education*, 22(1), 161 – 172.
- Holkup, P. A., Tripp-Reimer, T., Salois, E. M., Weinert, C. (2004). Community-based participatory research: An approach to intervention research with a Native American community. *Advances in Nursing Science*, 27(3), 162 – 175.
- Holt, N. L., & Neely, K. C. (2011). Positive youth development through sport: A review. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte*, 6(2), 299 -316.
- Howard, J. H. (1951). Notes on the Dakota Grass Dance. *Southwestern Journal of Anthropology*,

7(1), 82 – 85.

Howard, J. H. (1955). Two Dakota winter counts texts. *Plains Anthropologist*, 5, 13 - 30.

Howard, J. H. (1960a). Butterfly's Mandan Winter Count: 1833-1876. *Ethnohistory*, 7(1), 28-43.

Howard, J. H. (1960b). Dakota winter counts as a source of Plains history. *Anthropological Papers*, 173(61), 335 – 415.

Howard, J. H. (1976). Yanktonai ethnohistory and the John K Bear winter count. *Plains Anthropologist*, 21(73), 1 – 78.

Hudson, P., & Taylor-Henley, S. (2001). Beyond the rhetoric: Implementing culturally appropriate research projects in First Nations communities. *American Indian Culture and Research Journal*, 25(2), 93-105.

Hulan, R., & Eigenbrod, R. (2008). Introduction. A layering of voices: Aboriginal oral traditions. In R. Hulan & R. Eigenbrod (Eds.), *Aboriginal oral traditions: Theory, practice, ethics* (pp. 7-12). Black Point, NS: Fernwood Publishing.

Hunter, L. M., Logan, J., Goulet, J.-G., & Barton, S. (2006). Aboriginal healing: Regaining balance and culture. *Journal of Transcultural Nursing*, 17(1), 13–22.
doi:10.1177/1043659605278937

Institute for Integrated Science & Health. (n.d.). *Photo Gallery*.

<http://www.integrativescience.ca/Media/>

Iwama, M., Marshall, M., Marshall, A., & Bartlett, C. (2009). Two-eyed seeing and the language of healing and community-based research. *Canadian Journal of Native Education*, 32(2), 3 – 23.

Kamberelis, G., & Dimitriadis, G. (2011). Focus groups: Contingent articulations of pedagogy, politics, and inquiry. In Denzin, N.K. & Lincoln, Y.S., (Eds.), *The SAGE Handbook of*

- Qualitative Research* (4th ed., pp. 545 - 562). Los Angeles, London, New Delhi, Singapore, & Washington, DC: Sage.
- Kerpan, S., & Humbert, L. (2015). Playing together: The physical activity beliefs and behaviors of urban Aboriginal youth. *Journal of Physical Activity and Health*, 12(10), 1409 – 1413. <http://dx.doi.org/10.1123/jpah.2014-0533>
- Koski, J., Kelley, M. L., Nadin, S., Crow, M., Prince, H., Wiersma, E. C., & Musquash, C. J. (2017). An analysis of journey mapping to create a palliative care pathway in a Canadian First Nations community: Implications for service integration and policy development. *Palliative Care: Research and Treatment*, 10, 1–16. DOI: 10.1177/1178224217719441 <https://doi.org/10.1177/1178224217719>
- Kovach, M. (2018). Doing Indigenous methodologies: A letter to a research class. (Ch 9). In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (5th ed.)[epub]. Washington, DC: SAGE Publications.
- Kvale, S., & Brinkman, S. (Eds.). (2009). *Interviews. Learning the craft of qualitative research interviewing* (2nd ed.). Thousand Oaks, CA: Sage.
- Laviolette, G. (1991). *Dakota Sioux in Canada*. Winnipeg, MB: DLM Publications.
- Lincoln, Y. S., Lynham, S. A., & Guba, EG. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In Denzin, N. K., & Lincoln, Y. S., (Eds.), *The SAGE handbook of qualitative research* (4th ed., pp. 97 – 128). Los Angeles, London, New Delhi, Singapore, & Washington, DC: Sage.
- Maar, M. A., Lightfoot, N. E., Sutherland, M. E., Strasser, R. P., Wilson, K. J., Lidstone-Jone's, ...Williamson, P. (2011). Thinking outside the box: Aboriginal people's suggestions for conducting health studies with Aboriginal communities. *Public Health*, 125(11),747 -

743. doi:10.1016/j.puhe.2011.08.006

Maclean, J. (1894). Picture-writing of the Blackfeet. *Transactions of the Canadian Institute*, 5, 114 - 123.

Mallery, G. (1877). A Calendar of the Dakota Nation. U.S. Geological and Geographical Survey, *Bulletin*, 3(1), 3 - 25.

Martin, D. (2012). Two-eyed seeing: A framework for understanding Indigenous and non-Indigenous approaches to Indigenous health research. *Canadian Journal of Nursing Research*, 44(2), 21 – 42.

McHugh, T. F., Holt, N. L., & Andersen, C. (2015). Community based sport research with Indigenous youth. *Nuevas Perspectivas de Educación Física, Deporte y Recreación*, 28(2), 219 – 224.

McHugh, T. F., Coppola, A. M., Holt, N. L., & Andersen, C. (2015). “Sport is community” An exploration of urban Aboriginal peoples' meanings of community within the context of sport. *Psychology of Sport and Exercise*, 18, 75 - 84

McGregor, D. (2017). From 'decolonized' to reconciliation research in Canada: Drawing from Indigenous research paradigms. *ACME: An International Journal for Critical Geographies*, 17(3), 810 – 831.

Merriam-Webster. (2018). *Consideration*. Retrieved from <https://www.merriam-webster.com/dictionary/consideration>

Morse, J. M., & Field, P. (1995). *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks, CA: Sage.

Murphy, R. (2012). *About sharing circles*. <http://ravenspeaks.ca/education/resources/classroom-support/>

- Nabigon, H. C., & Wenger-Nabigon, A. (2012). "Wise Practices": Integrating traditional teachings with mainstream treatment approaches. *Native Social Work Journal*, 8, 43 – 55.
- Nursing Council of New Zealand. (2005). *Guidelines for cultural safety, the treatment of Waitangi and Maori health in nursing education and practice*. Wellington, New Zealand: Author.
- Palmer, J. D. (2008). *The Dakota peoples: A history of the Dakota, Lakota and Nakota through 1863*. Jefferson, NC: McFarland & Company Inc.
- Petrucka, P., Bassendowski, S., Bickford, D., & Goodfeather, V. (2012). Towards building consensus: Revisiting key principles of CBPR within the First Nations/Aboriginal Context. *Open Journal of Nursing*, 2, 143-148.
- Petrucka, P., Bickford, D., Bassendowski, S., Goodwill, W., Wajunta, C., Yuzicappi, B., ...& Raulick, M. (2016). Positive leadership, legacy, lifestyles, attitudes, and activities for Aboriginal youth: A WP approach for positive Aboriginal youth futures. *International Journal of Indigenous Health*, 11(1), 177 – 197.
- Pu, J., Chewning, B., Clair, I. D. S., Kokotailo, P. K., Lacourt, J., & Wilson, D. (2013). Protective factors in American Indian communities and adolescent violence. *Maternal and Child Health Journal*, 17(7), 1199–1207. <http://dx.doi.org/10.1007/s10995-012-1111-y>.
- Public Health Agency of Canada. (2011). *Reducing health inequalities: A challenge for our times*. Retrieved from http://publications.gc.ca/collections/collection_2012/aspc-phac/HP35-22-2011-eng.pdf
- Raczka, P. M. (1979). *Winter count: A history of the Blackfoot people*. Calgary, AB: Oldman River Cultural Centre.

- Rand, J. R. (2016). Inuit women's stories of strength: Informing Inuit community-based HIV and STI prevention and sexual health promotion programming. *International Journal of Circumpolar Health*, 75. <http://dx.doi.org/10.3402/ijch.v75.32135>
- Risch, B. (2000). A grammar of time. Lakota winter counts 1700 – 1900. *American Indian Culture and Research Journal*, 24(2), 23 – 48.
- Risch, B. (2003). Wife, mother, provider, defender, God: Women in Lakota winter counts. *American Indian Culture and Research Journal*, 27(3). 1 – 30.
- Roy, A. (2014). Aboriginal worldviews and epidemiological survey methodology: Overcoming incongruence. *International Journal of Multiple Research Approaches*, 8(1), 117–128.
- Sasakamoose, J., Bellegarde, T., Sutherland, W., Pete, S., McKay-McNabb, K. (2017). Miyo-pimātisiwin developing Indigenous cultural responsiveness theory (ICRT): Improving Indigenous health and well-being. *The International Indigenous Policy Journal*, 8(4). Retrieved from: <http://ir.lib.uwo.ca/iipj/vol8/iss4/1> DOI: 10.18584/iipj.2017.8.4.1
- Saskatchewan Indian Cultural Centre. (2009). *Cultural teachings: First Nations protocols and methodologies*. Saskatoon, SK: Author.
- Scott, K. M. (2006). *A contemporary winter count*. Master of Arts Thesis. University of Lethbridge, AB.
- Shea, J. M., Poudrier, J., Thomas, R., Jeffery, B., & Kiskotagan, L. (2013). Reflections from a creative community-based participatory research project exploring health and body image with First Nations girls. *International Journal of Qualitative Methods*, 12(1), 273 – 293.
- Sheppard, A. J., Shapiro, G. D., Bushnok, T., Wilkins, R., Perry, S., Kaufman, J. S., ... Yang, S. (2017). Birth outcomes among First Nations, Inuit and Métis populations. *Health Reports*, 28(11), 11 – 16.

- Smith, L. T. (2006). *Decolonizing methodologies*. New York: Zed Books Ltd.
- Smith, M. W. (1960). Mandan "history" as reflected in Butterfly's winter count. *Ethnohistory*, 7(3), 199 - 205.
- Smithsonian Institution. (2005). *The teachers guide*. Accessed at http://wintercounts.si.edu/html_version/html/learningresources0_menu.htm
- Smithsonian Institution. (2011). *Lakota winter counts*. Retrieved from <http://wintercounts.si.edu/index.html>
- Snowshoe, A., Crooks, C. V., Tremblay, P F., & Hinson, R. E. (2016). Cultural connectedness and its relation to mental wellness for First Nations youth. *Journal of Primary Prevention*, 38(1-2), 67 – 86. DOI 10.1007/s10935-016-0454-3
- Snowshoe, A., Crooks, C. V., Tremblay, P. F., Craig, W. M., & Hinson, R. E. (2015). Development of a cultural connectedness scale for First Nations youth. *Psychological Assessment*, 27(1), 249–259. doi:10.1037/a0037867.
- Snyder, M., & Wilson, K. (2015). Aboriginal peoples experiences of mobility and its impact on holistic health. *Health & Place*, 34, 181 – 189.
<http://dx.doi.org/10.1016/j.healthplace.2015.05.009>
- Standing Buffalo Dakota Nation. (2010). *Standing Buffalo Dakota Nation community plan*.
Halifax, NS: Dalhousie University, Cities & Environment Unit.
- Statistics Canada. (2017a). *Aboriginal peoples in Canada: Key results from the 2016 Census*. Retrieved from <http://www.statcan.gc.ca/daily-quotidien/171025/dq171025a-eng.htm>
- Statistics Canada. (2017b). *Standing Buffalo 78, IRI [Census subdivision], Saskatchewan and Saskatchewan [Province](table). Census Profile. 2016 Census*. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Retrieved from

<http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=4706811&Geo2=PR&Code2=47&Data=Count&SearchText=Standing%20Buffalo%2078&SearchType=Begins&SearchPR=01&B1=All&GeoLevel=PR&GeoCode=4706811&TABID=1>

- Streubert, H. J. (2011). Action research method. In Streubert H. J., & Carpenter, D. R. (Eds.), *Qualitative Research in Nursing: Advancing the Humanistic Perspective* (5th ed., pp. 300 - 321). Philadelphia: Lippincott Williams & Wilkins.
- Stringer, E. (1999). *Action Research* (2nd ed.). London: Sage.
- Stringer, E, & Genat, W. J. (2004). *Action research in health*. Upper Saddle River, New Jersey: Pearson.
- Sundstrom, L. (1997). Smallpox used them up: References to epidemic disease in Northern Plains winter counts, 1714-1920. *Ethnohistory*, 44(2), 305 – 343.
- Ten Fingers, K. (2005). Rejecting, revitalizing, and reclaiming: First Nations work to set the direction of research and policy development. *Canadian Journal of Public Health*, 96(1), S60 – S63.
- The Canadian Encyclopedia. (2018). *Reserves*. Retrieved from <https://www.thecanadianencyclopedia.ca/en/article/aboriginal-reserves>
- The First Nations Information Governance Centre. (2014). *Ownership, control, access and possession (OCAPTM): The path to First Nations information governance*. Ottawa: Author.
- Therrell, M. D., & Trotter, M. J. (2011). Waniyetu wówapi. *Bulletin American Meteorological Society*, May, 583 – 592.
- Thoms, J. M. (2007). *Leading an extraordinary life: Wise practices for an HIV prevention*

- campaign with Two-Spirit men*. Retrieved from <http://2spirits.com/PDFolder/Extraordinarylives.pdf>
- Thornton, R. (2002). A Rosebud reservation winter count, circa 1751–1752 to 1886–1887. *Ethnohistory*, 49(4), 723–741. doi:10.1215/00141801-49-4-723
- Truth and Reconciliation Commission of Canada. (n.d.). *What is reconciliation?* [online video]. Available from <http://www.trc.ca/websites/reconciliation/index.php?p=312>
- Truth and Reconciliation Commission of Canada. (2015a). *Canada's residential schools: Reconciliation. The final report of the Truth and Reconciliation Commission of Canada. Volume 6*. Retrieved from http://nctr.ca/assets/reports/Final%20Reports/Volume_6_Reconciliation_English_Web.pdf
- Truth and Reconciliation Commission of Canada. (2015b). *Truth and Reconciliation Commission of Canada: Calls to action*. Winnipeg, MB: Author.
- Tyser, J., Scott, W. D., Readdy, T., & McCrea, S. M. (2014). The role of goal representations, cultural identity, and dispositional optimism in the depressive experiences of American Indian youth from a Northern Plains tribe. *Journal of Youth and Adolescence*, 43(3), 329–342.
- United Nations. (2008). *United Nations declaration on the rights of Indigenous peoples*. Retrieved from <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>
- United Nations. (2013). *Access to justice in the promotion and protection of the rights of Indigenous peoples*. Retrieved from <http://www.ohchr.org/Documents/Issues/IPeoples/EMRIP/Session6/A-HRC-EMRIP->

- Vukic, A., Gregory, D, Martin-Misener, R., & Etowa, J. (2016). Perspectives for conducting indigenous Qualitative research from a project exploring Mi'kmaw youth mental health. *Journal of Ethnographic & Qualitative Research*, 10(3), 209 – 229.
- Walker, M., Fredericks, B., Mills, K., & Anderson, D. (2014) “Yarning” as a method for community-based health research with Indigenous women: The Indigenous women's wellness research program. *Health Care for Women International*, 35(10), 1216-1226, DOI: 10.1080/07399332.2013.815754
- Wallerstein, N., & Duran, B. (2008). The theoretical, historical, and practice roots of CBPR. In Minkler, M., & Wallerstein, N. (Eds.), *Community-based Participatory Research for Health: From Process to Outcomes* (2nd ed., pp. 5 – 19). San Francisco, CA: Jossey-Bass.
- Wesley-Esquimaux, C. C., & Snowball, A. (2010). Viewing violence, mental illness and addiction through a wise practices lens. *Aboriginal Policy Research Consortium International*, 8(), 390 – 407. DOI 10.1007/s11469-009-9265-6
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Black Point, NS: Fernwood Publishing.
- Wilson, C., Oliver, V., Flicker, S., Native Youth Sexual Health Network, Prentice, T., Jackson, R., ... Mitchell, C. (2016). ‘Culture’ as HIV prevention. *Gateways: International Journal of Community Research and Engagement*, 9(1), 74 – 88. doi: 10.5130/ijcre.v9i1.4802
- Wilson, D., & Neville, S. (2009). Culturally safe research with vulnerable populations. *Contemporary Nurse*, 33(1), 69–79.
- Windchief, S., Polacek, C., Munson, M., & Cummins J. D. (2017). In reciprocity: Responses to critiques of Indigenous methodologies. *Qualitative Inquiry*, [onlinefirst]. DOI:

Yellow Bird, M. (2012). Neurodecolonization: Using mindfulness practices to delete the neural networks of colonialism. In Waziyatawin & M. Yellow Bird (Eds.), *For Indigenous minds only: A decolonization handbook* (2nd ed., pp. 57–84). Santa Fe, NM: School for Advanced Research Press.

Yeun, F., Episknew, J., Linds, W., Ritenburg, H., Goulet, L., & Schmidt, K. (2013). “You might as well call it planet of the Sioux”: Indigenous youth, imagination and decolonization. *Pimatisiwin*, 11(2), 269–282.